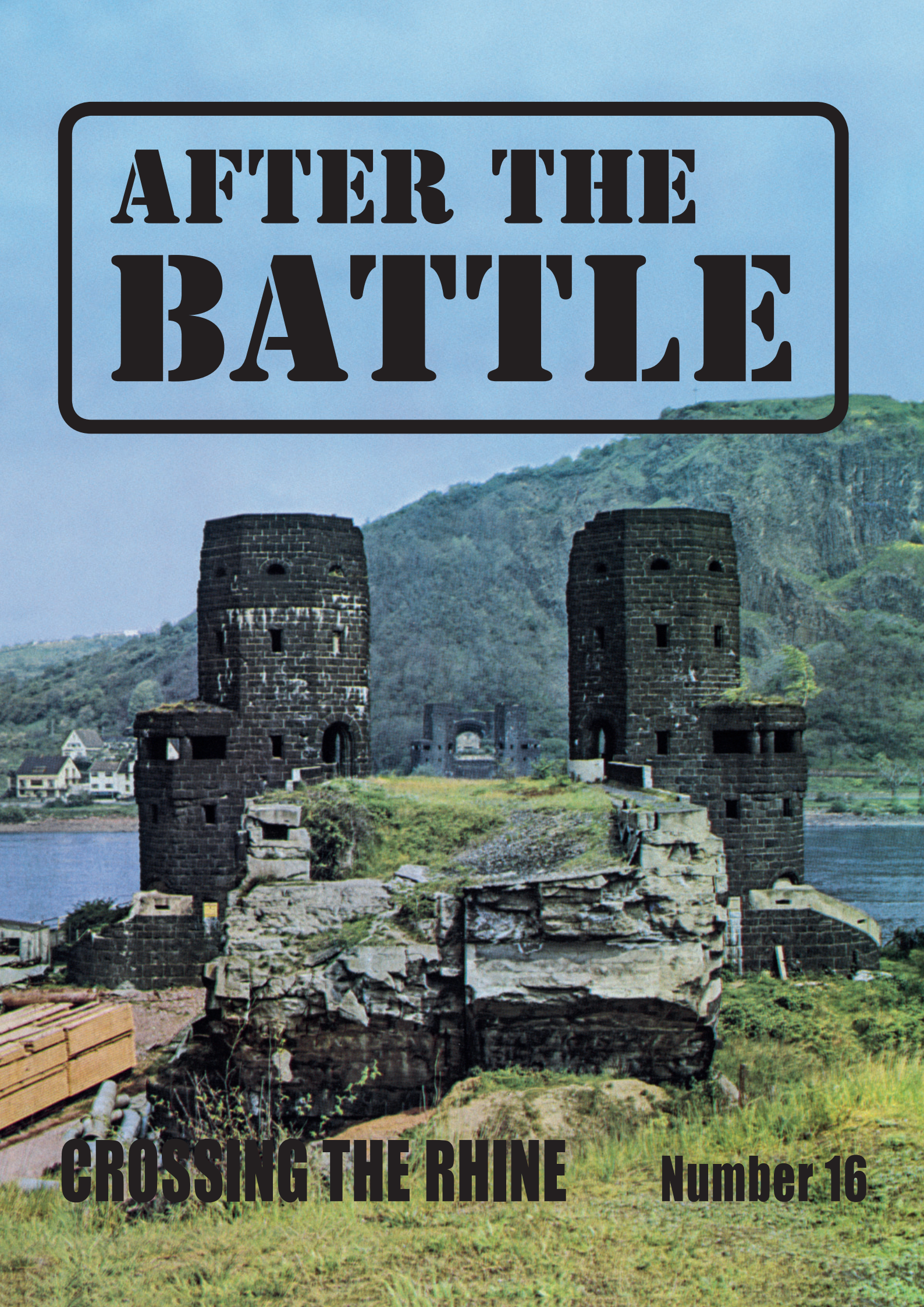
AFTER THE BATTLE



CROSSING THE RHINE

Number 16

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Front Cover: The twin towers of the Ludendorff railway bridge on the west bank of the river Rhine at Remagen. The crater in the approach to the bridge, blown by the Germans, can be seen in the foreground. The Becher Furniture Works are to the left with the Erpeler Ley cliff in the background.

Centre Pages: A Handley Page Hampden I from No. 455 Squadron, RAAF, the sister squadron to No. 144 in Russia. This particular aircraft, AT 137, was not one of those destined to fly to the Soviet Union on September 4, 1942 as it suffered a flying accident and was burnt out on June 8, 1942 (Charles Brown).

Back Cover: One of the Matilda CDLs converted at Lowther Castle in the summer of 1942, now on display at the Royal Armoured Corps Tank Museum at Bovington. The Matilda's correct title is an infantry Tank MkII and this one, (WD No. T 7341), was built in June 1941 by Ruston & Hornsby; the 70th tank out of the 80 constructed under contract T 6907 of April 19, 1939. Its insignia denotes a tank of C Squadron, 11 RTR.

Acknowledgements:

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Crusade in Europe by Dwight D. Eisenhower, William Heinemann.

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Winston Churchill's visit to the Rhine includes extracts from:

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Footprints in Time by John Colville, Collins.

Ten Chapters by Field-Marshal Montgomery, Hutchinson.

The CDLs at Lowther Castle includes invaluable contributions by Peter Connon, Major-General J. F. C. Fuller and Colonel P. H. Hordern.

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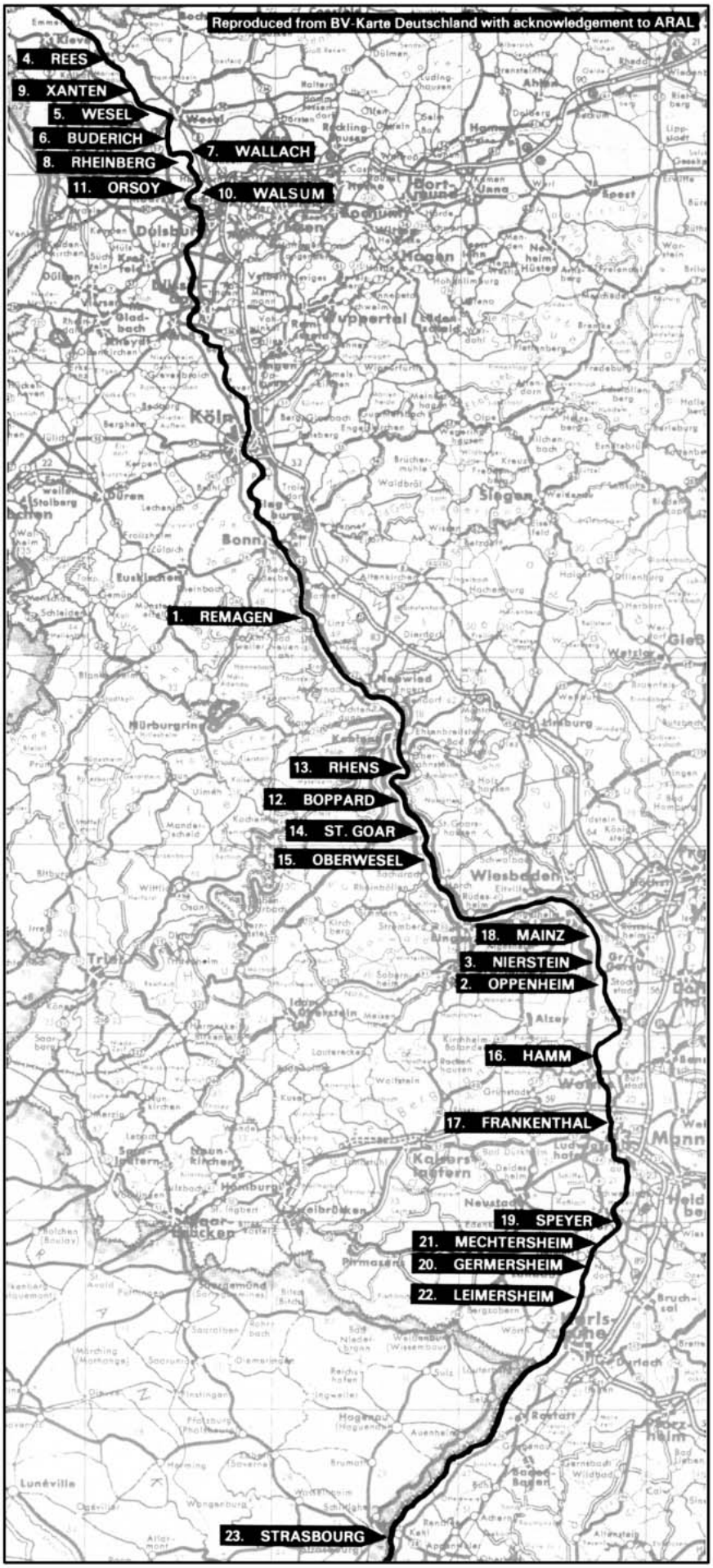
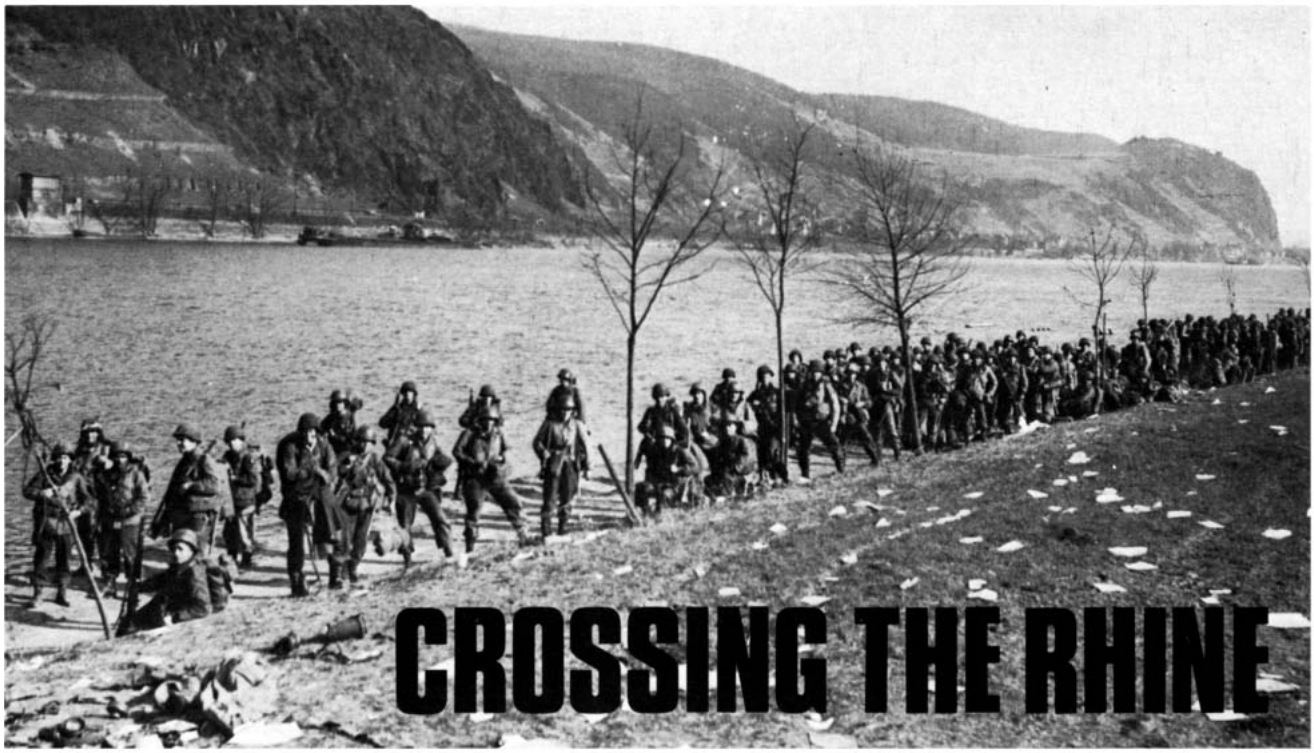




CROSSING THE RHINE

GIs from the 2nd Division line up on the west bank of the Rhine in the First Army sector, awaiting transportation to cross the river (Associated Press).

The Rhine river is the great natural frontier guarding the western approach to the heart of Germany. In fact, since the Treaty of Versailles in 1919, the Rhine has formed the actual frontier between Germany and France for a hundred miles from Switzerland to Karlsruhe, although the internationalisation of the river under the treaty was denounced by the German Government on November 14, 1936.

In 1945, the river was navigable for 810 miles from its mouth and had an average width of 600 yards and a depth of nine feet. Shortly after crossing the Dutch frontier, the river splits into the Neder Rijn and the Waal. Twenty-two road bridges and twenty-five railway bridges provided crossing points to inner Germany. The closest bridges to Germany in Holland cross the Waal at Nijmegan and the Neder Rijn at Arnhem but an Allied attempt to capture the road and rail bridge at the latter was successfully repulsed by the German army in September 1944.

The first Allied forces to reach the Rhine proper, directly facing Germany, were troops of the First French Army who fought their way to Rosenau, four miles north of Basle, at 6.30 p.m. on November 19, 1944. Meanwhile, planners at SHAEF HQ, were already deliberating the fate of the bridges across the Rhine.

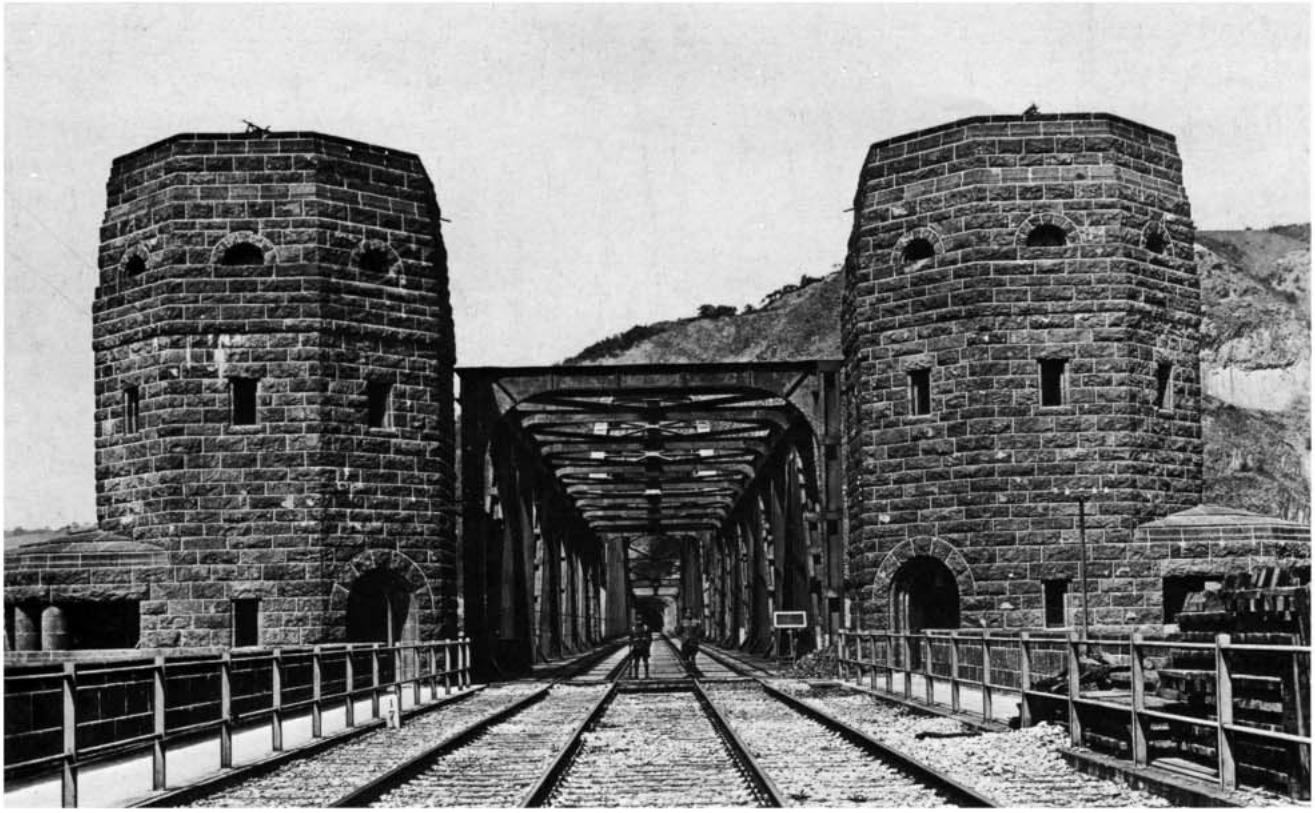
'In the late fall, as we approached the borders of Germany, we studied the desirability of committing our air force to the destruction of the Rhine bridges,' wrote General Eisenhower after the war, 'on which the existence of the German forces west of the river depended. If all of them could be destroyed, it was certain that with our great air force we could so limit the usefulness of floating bridges that the enemy would soon have to withdraw. We entertained no hope of saving these bridges for our own later use. It was accepted that once the enemy decided that he had to retreat he would destroy all the bridges, and our arrival would find none standing, unless by sheer accident.

'Our reasons for declining to commit the air force against the bridges were based upon considerations of priority and effectiveness. To destroy merely a few was of little use. Even with the best of flying conditions the task would require a prolonged and heavy bombing effort. But at that period of the year in Europe there rarely occurs a day of sufficiently good weather to allow pin-point bombing from great heights, and enemy anti-aircraft was still so strong and so efficient that low flying bombing was far too expensive. Consequently the only method we could employ against the bridges was blind bombing through the clouds. The Air Staff calculated that destruction of the bulk of the bridges would require vastly more time and bomb tonnage than we could afford to divert from other vitally important purposes.'

The Allied decision, not to make a concerted attempt to destroy the bridges, enabled the Germans to withdraw considerable forces across the river during January and February 1945; forces which would otherwise have been surrounded on the west bank of the Rhine following the failure of the German Ardennes offensive in December. As Allied forces closed the river, the bridges, already prepared for demolition before the outbreak of war, were blown in turn. All that is except one — the bridge at Remagen.

ASSAULT CROSSINGS OF THE RHINE

1.	March 7, 1600	Remagen	US First Army, 27th Armd. Inf. Batt.
2.	March 22, 2200	Oppenheim	US Third Army, 5th Div. 11th Inf. Reg., 3rd Batt.
3.	March 22, 2200	Nierstein	US Third Army, 5th Div., 11th Inf. Reg., 1st Batt.
4.	March 23, 2100	Rees	Second British Army, 51st Highland Div.
5.	March 23, 2200	Wesel	Second British Army, 1st Commando Brigade
6.	March 24, 0200	Büderich	US Ninth Army, 30th Inf. Div., 119th Inf. Reg.
7.	March 24, 0200	Wallach	US Ninth Army, 30th Inf. Div., 117th Inf. Reg.
8.	March 24, 0200	Rheinberg	US Ninth Army, 30th Inf. Div., 120th Inf. Reg.
9.	March 24, 0200	Xanten	Second British Army, 15th Scottish Div.
10.	March 24, 0300	Walsum	US Ninth Army, 79th Inf. Div., 315th Inf. Reg.
11.	March 24, 0300	Orsoy	US Ninth Army, 79th Inf. Div., 313th Inf. Reg.
12.	March 25, 0001	Boppard	US Third Army, 87th Inf. Div., 345th Inf. Reg.
13.	March 25, 0001	Rhens	US Third Army, 87th Inf. Div.,347th Inf. Reg.
14.	March 26, 0200	St. Goar	US Third Army, 89th Inf. Div., 354th Inf. Reg.
15.	March 26, 0200	Oberwesel	US Third Army, 89th Inf. Div., 353rd Inf. Reg.
16.	March 26, 0230	Hamm	US Seventh Army, 45th Inf. Div.
17.	March 26, 0230	Frankenthal	US Seventh Army, 3rd Inf. Div.
18.	March 28, 0100	Mainz	US Third Army, 80th Inf. Div., 317th Inf. Reg.
19.	March 31, 0230	Speyer	First French Army, 3rd Régiment de Tirailleurs Algeriens
20.	March 31, 0600	Germersheim	First French Army, 4th Régiment de Tirailleurs Marocains
21.	March 31, 0600	Mechtersheim	First French Army, 151st Régiment d'Infanterie
22.	April 2,	Leimersheim	First French Army, 9th Division d'Infanterie Coloniale
23.	April 15, 1100	Strasbourg	First French Army, 23rd Régiment d'Infanterie



The Ludendorff Railway Bridge

Above: **The bridge pictured under German guard. Note the machine guns on top of the towers.** *Below:* **The contrast today.**

In the year before the First World War, the far-sighted German commander, Feldmarschal Count von Schlieffen, realised that, militarily, Germany needed the ability to transport troops quickly across the country to be able to fight a war on either the eastern or western front. He pressed for the building of three additional bridges across the Rhine but it was not until 1916 that work began on a new railway bridge near the little town of Remagen, fifteen miles south of Bonn.

The construction company was Grün and Bilfinger of Cologne. The bridge was designed with a central arch of 513 feet resting on two stone piers in the river joined to the banks by two lattice box girder sections each 278ft long, the overall length being 1,069ft. Two, thick, stone towers, complete with gun ports were built at either end to protect the bridge from attack and a demolition chamber was incorporated in each stone pier. When completed in 1918 the bridge, named after General Erich Ludendorff, carried two railway tracks with a footpath on either side. On the eastern bank, the track entered a tunnel, about a quarter of a mile long, through a 600ft cliff called the Erpeler Ley.

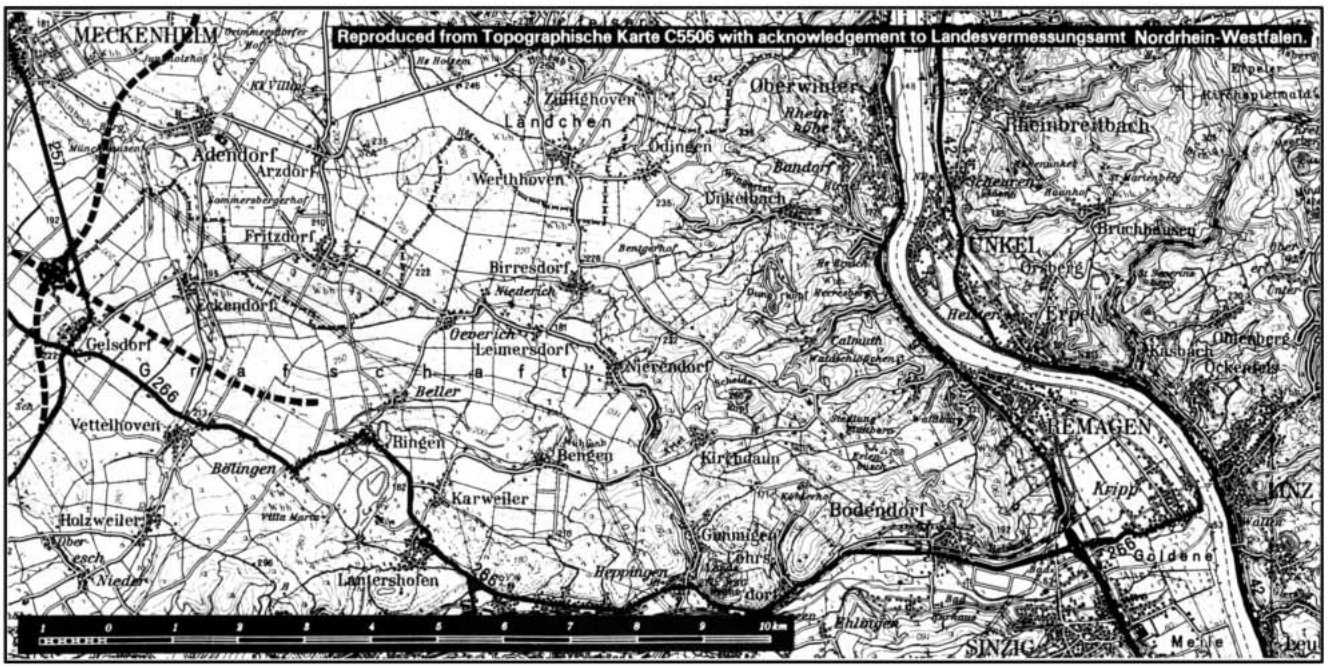
During the occupation of the Rhineland after the First World War, during an examination of the bridge, the French discovered the demolition chambers and filled both with cement. The Germans subsequently found it would be impossible to remove the concrete without dismantling the bridge and so, in 1938, a year before the outbreak of the Second World War, they devised an alternative demolition plan.

Sixty special zinc-lined boxes were constructed to hold four kilograms of explosive each and these were fitted to the bridge members in critical positions. The actual explosives were stored in the dry nearby but could be placed in the boxes at a moments notice. The charges were electrically connected to a main cable buried in a thick steel tube beneath the railway line and could be detonated just inside the entrance to the railway tunnel. A back-up system, in case of electrical failure, was the provision of a separate charge to be detonated by primer cord (which had to be lit by hand) about 75 metres outside the tunnel entrance.

The Tactical Air Command's interdiction campaign against twenty-two of the railway lines running westwards from the Rhine bridges began on September 4, 1944. This rail-cutting programme, designed to assist the ground forces in their advance to the Rhine, led to the Ludendorff Bridge being damaged on October 19 by thirty-three aircraft of the US 36th Group. Although the Group claimed the bridge 'destroyed' German engineers had it operational again by November 9.

Another four bombs hit the bridge on December 29 during Allied efforts to counter the Ardennes offensive. The damage caused this time was serious and the bridge hung only from its upper span. The Germans estimated it would take several weeks to repair the lower girders and railway track, and other attacks during January and February further weakened the bridge. Repairs were constantly interruped during the frequent air-raids and the sinking of the passenger ferry during a bombing raid in February meant that, for the civilians who lived and worked on both sides of the river, the bridge was now the only crossing point for miles in either direction. During the first week of March, the bridge was planked over between the rails to allow it to be used by road vehicles.

The rapid American armoured advance led to an additional demolition plan being put into operation by the Germans. In order to prevent a surprise crossing, it was arranged that a crater would be blown in the western approach to the bridge to give adequate time



for the main charges to be placed and detonated. Because a lucky bomb hit on one of the demolition chambers of the Cologne-Mülheim bridge had caused its premature destruction, Hitler had instructed that explosives were only to be put in position on the other bridges when the enemy were within eight kilometres of a bridge and that the detonators must be inserted at the last possible moment.

Responsibility for the demolition of the Ludendorff bridge was in the hands of Hauptmann Karl Friesenhahn and his engineer combat battalion whilst defence of the bridge (including the whole Remagen area) rested with Hauptmann Willi Bratge commanding the bridge security company. These troops were largely made up of convalescent soldiers from the army hospital at nearby Linz and, at the beginning of March 1945, totalled just 36 men. They were armed with an assortment of English, German, Polish, Russian and Italian weapons. Hauptmann Friesenhahn had 120 engineers who could, in emergency, be used as infantry; likewise the 200 men manning the anti-aircraft batteries in the town, on the bridge and on top of the Erpeler Ley. To this total could be added 180 Hitler Jugend, 50-100 Volksturm members and a dubious 120 Eastern 'volunteers' — roughly 750 men all told.

By March 6, the German situation in the Bonn-Remagen area was critical. The American 9th Armoured Division had penetrated the German Fifteenth Army line by nine miles. Overall command of the German troops in the area had been controlled since March 1 by General Walter Botsch. No sooner had he become familiar with his task than he was switched on March 6 to replace the German LIII Corps commander who had unexpectedly been captured by the US Third Army. His replacement in the Remagen bridgehead was General von Bothmer, the Bonn defence commander. Then, at 1.00 a.m. on March 7, control of the area was suddenly switched again — to General Otto Hitzfeld, commander of LXVII Corps. Within half-an-hour he had deputised his adjutant, Major Hans Scheller, with orders to drive to the bridge. He set out with eight men and a radio truck but, running low on petrol himself, he sent the radio vehicle on ahead. It was a lucky decision. Major Scheller, after detouring a few kilometres south of Remagen to refuel, finally managed to reach the bridge at 11.00 a.m. but the radio truck did not; they found American tanks already between themselves and Remagen.

Sixteen kilometres north-east of the bridge, Company A of the US 27th Armoured Infantry Battalion had spent the night in Stadt Meckenheim. It too had undergone a recent change of commander when Lieutenant Edwards had been killed and the replacement officer, Captain Frederick F. Kriner, had himself been hit the evening before when they reached Stadt Meckenheim. On the morning of March 7, the new Company Commander was Lieutenant Karl Timmermann and, at 6.00 a.m., he was summoned to the CP of the 14th Tank Battalion (which was spearheading the 9th Armoured Division's drive to the Rhine) which had been set up in a nearby bombed building. There, in the kitchen, Colonel Leonard Engeman detailed Lieutenant Timmermann's company to act as the advance guard for the whole task force. With his infantry in half-tracks, he would have the assistance of Company A of the 14th Tank Battalion with their new Pershing tanks. His objective was to be the town of Remagen.

The column was delayed in its start until a path could be bulldozed through the piles of rubble blocking the exit road from Stadt Meckenheim to the south. Then, with Privates Ralph Munch, Bob Crawford and Alex Giles in the leading half-track, they set off with Lieutenant Timmermann riding his jeep up and down the line to keep the vehicles together.

They passed through Adendorf and Arzdorf without incident only to encounter small-arms fire when stopped by a road block at the entrance to Fritzdorf but, after a quick, outflanking movement, a group of German soldiers surrendered. From this point, Lieutenant Timmermann took the lead in his jeep for a half-a-mile before returning to keep the column moving. A few minutes later, just before they reached Oeverich, a panzerfaust opened fire nearly hitting the leading half-track. This was the signal for the Pershings to be brought up and, after a few rounds had been fired, the small group of German defenders surrendered.

It was now about 11.00 a.m. and the Battalion was already halfway to Remagen. On the far side of Niederich another group of

Roger Bell, our ETO advisor, in his element on our trip to reconstruct the route taken by Timmermann's men, points out the Waldschlösschen inn.

Lieutenant Karl H. Timmermann, the officer that led the attack on the bridge.

Above: **The view from the hillside overlooking St. Apollinaris church, close to the spot where the 27th Armoured Infantry emerged from the forest.**

Germans were persuaded to surrender after a few bursts of fire. As the prisoners were being rounded up the German officer drew his pistol and began firing wildly only to fall moments later riddled with American bullets.

The streets at Leimersdorf were deserted as the column turned left onto the more direct road to Remagen via Birresdorf where the column was greeted only with white sheets of surrender hanging from the windows. Soon, the column entered the forest which covered the high ground on the western edge of the Rhine. The silent, pine forest was unnerving but the leading half-tracks passed the Platt-born crossroads without incident. By now, 2nd Lieutenant Jim Burrows had taken the lead in his half-track and he was soon passing the first sign of habitation in the woods — a small tavern, the Waldschlösschen, run by Herr Joseph Allmang and his family. Lieutenant Timmermann pulled up when he reached the tavern and asked Frau Allmang for details of the enemy. He was told there were no soldiers there and no guns. Just then his attention was drawn to the antics of some of his men further down the road. Jumping in his jeep he drove down the hill and round the right-hand bend where the road emerged from the woods. Ahead and below from where he stood ran the broad expanse of the Rhine. Spanning the river in the middle distance was a bridge and, to his amazement, Lieutenant Timmermann saw that it was still intact!

The news was quickly relayed back to Colonel Engeman who soon arrived on the hillside overlooking the river together with Major Murray Deevers, Commander of the 27th Armoured Infantry Battalion and his Operations Officer Major Don Russell. From there they could see a steady stream of traffic proceeding eastwards across the bridge. Major Deevers ordered Lieutenant Timmermann and the Company C Commander, William McMarter, down the hill on a reconnaissance. When they returned it was decided that Lieutenant Timmermann's Company A would move against the town centre whilst Company C would attack the north-western end of Remagen protecting Company A's left flank. Company B, under Lieutenant Jack Liedike, would be on the right flank and would enter the south-eastern part of town.

News of the discovery of an intact Rhine bridge travelled fast and, shortly after 1.00 p.m., Brigadier-General William M. Hoge, Commanding General of Combat Command B of the 9th Armoured, arrived on the scene. He took one look and ordered the attack to take the town to commence at once. Speed was of essence. There was no time to lose.

Above: **T/4 Robert Runyan of the US Army Signal Corps photographed these First Army troops in the Marktplatz at Remagen on March 9 (US Army).** *Below:* **The view today from the doorway of No. 2 Hauptstrasse.**

American half-tracks and other First Army transport queue up on the old Reichstrasse outside Remagen waiting to turn right to the railway bridge to cross the river (US Army).

Exactly the same spot today beside what is now Bundes-strasse 9 — the Rheinstrasse — which runs along the western bank of the Rhine from Cologne to Mainz.

Aided by the 90mm fire from the American tanks, the GIs stormed into the town and, by 3.00 p.m. were nearing the bridge. On the far side of the Rhine, Hauptmann Friesenhahn could see the Americans reach the Becher Furniture Works nestling right up against the western approach to the bridge. He gave the order to fire the crater charge and, six seconds later, a thirty-foot gap was blown in the approach ramp in the faces of Timmermann's men.

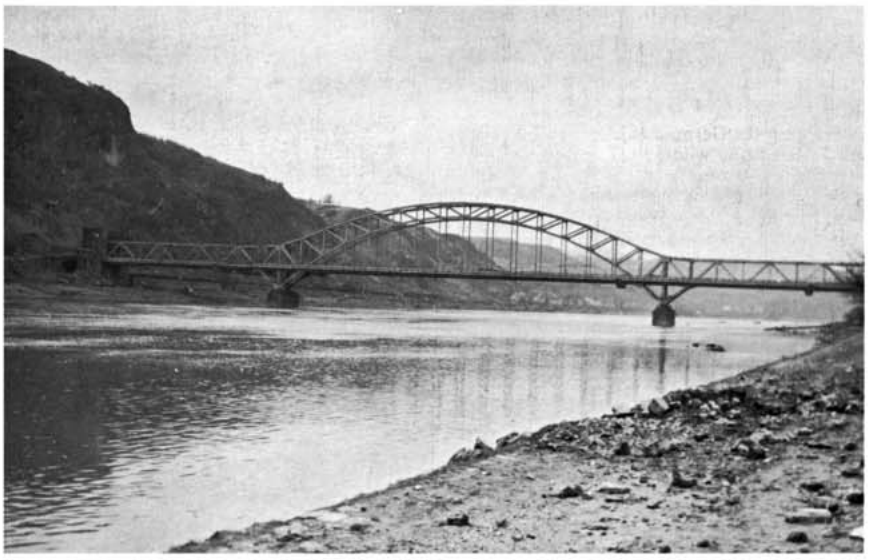
Across the bridge on the far bank. they could see the Germans making frantic preparation for the big blow. The wires and charges were clearly visible hanging on the girders. Most of A Company with supporting tanks had taken up positions around the western end of the bridge all ready to watch a rarely-seen, spectacular event.

Meanwhile, just three kilometres south of Remagen at Sinzig, another American 9th Armoured task force had just succeeded in successfully rushing the bridge over a tributary to the Rhine, the Ahr river. When interrogated, civilians in the town boasted to the Americans that the Ludendorff bridge was to be blown at 4.00 p.m. The information was quite false but when relayed to Colonel Hoge at Remagen, it spurred him to even greater exhortations. He realised there was just a chance of capturing the bridge intact if they moved fast. Turning to Colonel Engeman he ordered the immediate capture of the bridge. Straight away, Engeman started down the winding road in his jeep, as did Majors Deevers and Russell.

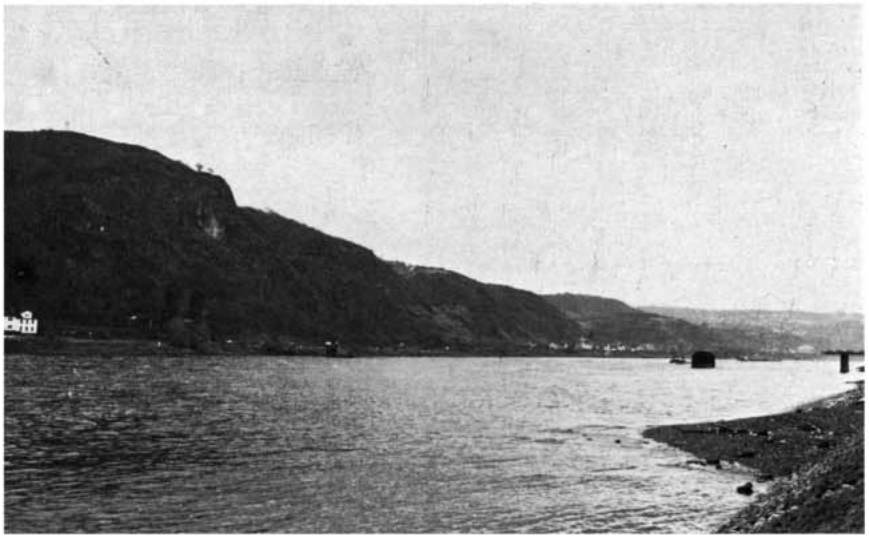
Finding Lieutenant Timmermann and Lieutenant Mott (a platoon commander in Company B of the 9th Armoured Engineer Battalion) they ordered them to cross the bridge. Lieutenant Timmermann's question: 'What if the bridge blows up in my face?' remained unanswered.

Meanwhile, in the railway tunnel, Hauptmann Friesenhahn realised they could delay no longer. Shells were exploding all around the tunnel entrance and the Americans were beginning to fire smoke to screen the bridge from view. Small-arms fire swept the bridge and eastern bank. Friesenhahn shouted to Hauptmann Bratge to get the order to blow the charge from Major Scheller. Because of Hitler's strict order not to destroy bridges prematurely, to cover himself, Hauptmann Bratge made sure the demolition order was written down — at precisely 3.20 p.m.

By this time, the tunnel was crowded, not only with soldiers but civilians as well taking shelter from the shelling; mothers comforting their children, foreign workers and even some animals. The mechanism for the electrical exploder worked like a clock which, when fully wound up with a key, would fire the charge. However, when Hauptmann Friesenhahn turned the key, nothing happened. He tried it again without result and then a third time. Friesenhahn realised the circuit must have been cut although it had been checked only a few minutes earlier. Calling for a volunteer to crawl the 75 metres along the track to light the emergency primer cord, Unteroffizier Faust stepped forward. He made his way out of the tunnel and onto the bridge now being swept by continuous American fire. Hauptmann Friesenhahn had his doubts that the emergency charge would be sufficient to collapse the bridge. A few hours earlier he had only received half of the 600 kilograms of Army explosive considered necessary and what was delivered turned out to be an inferior industrial explosive



Above: **This would have been the view of the bridge as seen by the men of Company C as they advanced along the river bank; photo taken by T/4 Runyan on March 9 (US Army).** *Below:* **Our comparison was taken in March 1975 — 30 years later.**



'Donerit'. Unteroffizier Faust reached the primer cord, successfully lit it and was still on his way back to the tunnel when the charge exploded with a roar.

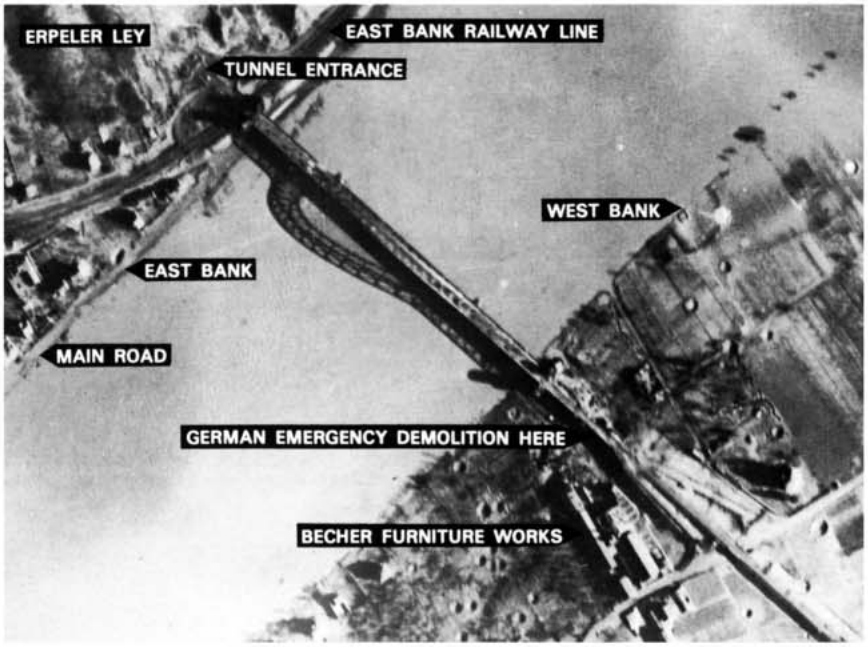
Timbers shot into the air and the whole bridge seemed to rise from its foundations. Lieutenant Timmermann on the western bank was just detailing his three platoon leaders when he was interrupted by the deafening explosion. Thankful that they now would not have the task of capturing the bridge, they watched, in horror — as did Hauptmann Friesenhahn at the other end — as the smoke cleared to show the bridge still standing. The mission was still on.

Lieutenant Timmermann moved tentatively up to the bridge and gave the traditional 'Follow me' gesture. A tank fired at one of the towers on the far side, from which a machine gun had opened up. As the men started out on the bridge, they were joined by Lieutenant Mott and two engineers who began cutting the wires to the main demolition charges. Machine gun fire was still coming from the right-hand tower and the tunnel entrance, together with enfilade fire from a half-submerged barge two hundred yards upstream. Tank fire knocked out the barge and Timmermann, with a constant, 'Git goin', Git goin', dodged from girder to girder.

Sergeant Joe DeLisio was the first to reach the right-hand tower and he began to run up the circular staircase to where the machine gun was pinning down the men on the bridge. His platoon, No. 3, followed and one of his squad, Alex Drabik, is credited as being the first American to completely cross the bridge; the first man across the Rhine in Germany in the Second World War. The other tower was entered by Mike Chinchar of No. 1 platoon with Privates Samele and Massie. The time was just before 4.00 p.m.

Within a little while, Lieutenant Timmermann had 120 men on the far side of the Rhine and the conquest of the Erpeler Ley cliff began. A few Germans near the entrance to the tunnel surrendered. Major Scheller managed to leave by the rear entrance to the tunnel, to report the failure to destroy the bridge, before the advancing GIs could cover that exit. Hauptmann Bratge assumed command and, against his wishes, the rest of the Germans in the tunnel surrendered at 5.30 p.m.

Meanwhile American engineers were furiously at work filling the crater on the western approach and checking the bridge for damage. It was realised that without armour on the far bank the infantry could easily be wiped out by a concerted German counter-attack. General Hoge authorised the use of materials from homes and buildings in



Above: **An RAF reconnaissance photograph of the bridge taken sometime between its capture on March 7 and collapse on March 17 (IWM).**

Above: **The entrance to the railway tunnel in the Erpeler Ley cliff, in which the German defenders made their last stand, photographed by T/3 Hall and released by the SHAEF Field Press censor on March 16 (US Army).** *Below:* **The bricked-up entrance; in 1975 a mushroom farm, but now containing scientific measuring instruments.**

The rear entrance to the tunnel by which Major Scheller escaped only to be executed by the Nazis.

Left: **Troops, directed by Military Police, pour across the bridge to expand the east-bank bridgehead (IWM).** *Right:* **The overgrown approach to the bridge in March 1976, which has since been removed for the construction of a concert hall.**

'It was so dark, I could just make out the white tape that marked the shell holes in the bridge,' said Sergeant William J. Goodson, who drove the first American tank across the bridge.

Remagen to help speed up repairs. By midnight, Lieutenant Mott decided the bridge was safe enough to try and get the first tank across. Sergeant Goodson's Sherman was selected to be followed, at five-yard intervals, by eight others. When they reached the far bank successfully, Colonel Engeman asked Major Deevers to try to follow up with some tank destroyers. As the TD was lighter than the Sherman, no trouble was anticipated but, three-quarters of the way across, the right-hand tread of the leading tank destroyer fell into the hole torn by the German emergency demolition. No amount of effort could shift the precariously balanced TD and even attempts to tip it into the river failed.

The tank destroyer was finally extricated at 5.30 a.m. to allow the first non-9th Armoured Division troops to cross — the 1st Battalion of the 310th Regiment of the 78th Division.

General Eisenhower had been informed of the capture of the Ludendorff bridge by General Bradley whilst at dinner at Reims SHAEF HQ with the corps and division commanders of the American Airborne forces.

'When he reported that we had a permanent bridge across the Rhine I could scarcely believe my ears.' records Eisenhower in his memoirs. 'He and I had frequently discussed such a development as a remote possibility but never as a well-founded hope.

'I fairly shouted into the telephone: ''How much have you got in that vicinity that you can throw across the river?''

Above: **The official caption states: 'A US gunner on a half-track on the alert for German aircraft trying to bomb the bridge at Remagen,' although his field of fire seems greatly restricted.** *Below:* **Nevertheless, in March 1975, we blocked the same, narrow street, Ackermannsgasse, for our comparison.**

Left and above: **A picture often used to indicate the first view the GIs had of the bridge was, in fact, taken from the Erpeler Ley (US Signal Corps). Even the fence support remains today.**

'He said: "I have more than four divisions but I called you up to make sure that pushing them over would not interfere with your plans."

'I replied: "Well, Brad, we expected to have that many divisions tied up around Cologne and now those are free. Go ahead and shove over at least five divisions instantly, and anything else that is necessary to make certain of our hold."

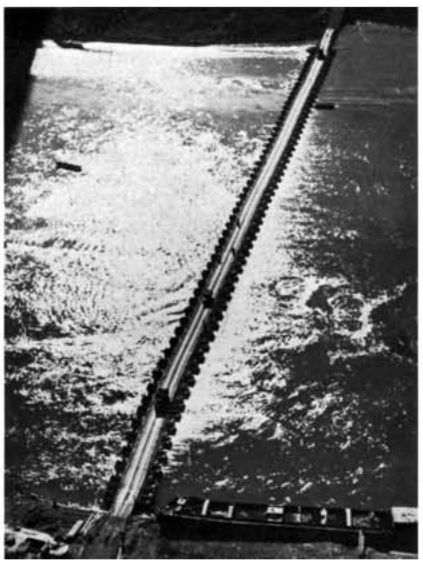
'His answer came over the phone with a distinct tone of glee: "That's exactly what I wanted to do but the question had been raised here about conflict with your plans, and I wanted to check with you."'

Within twenty-four hours of the capture of the bridge, the American bridgehead had expanded to 8,000 men and within a week to 25,000 combat troops. Because the engineers were concerned about the great damage the bridge had suffered, traffic was limited to a single lane eastwards using the northern side of the bridge to avoid the demolished section. Four-inch planks, fifteen feet long were laid over the centre span to make it passable for wheeled vehicles although the weight of this additional fifty tons of timber did nothing to strengthen the bridge.

In order to increase the capacity to build-up the east-bank bridgehead, work began on the construction of extra, emergency floating bridges on March 9. Captain Bill McKinsey of the 291st Engineer Combat Battalion (Colonel David E. Pergrin's unit responsible for halting the advance of the Kampfgruppe Peiper during the Battle of the Bulge, *see After the Battle No. 4*), was already surveying a site for the first bridge at daybreak. He chose a location 200 yards downstream from the Ludendorff bridge and, working round the clock, they completed the longest tactical ponton bridge (floating treadway) at that time in the ETO in thirty-two hours. The bridge was built under constant German artillery fire and would have been finished sooner had a completed ponton section not been blown out of the water. German shells were landing at the rate of one every two minutes; more than 600 exploding in the area over the next ten days. The 291st bridge was opened to traffic at 7.00 a.m. on March 11.

Meanwhile the 51st Engineer Combat Battalion, led by Lieutenant-Colonel Harvey Fraser, were at work constructing a heavy ponton bridge about a mile upstream at Linz.

Above: **The 291st Engineer Combat Battalion bridge, photographed by Sergeant William Spangle of the US Signal Corps on the morning of March 11.** *Below:* **Although we did not know from which building the picture had been taken, by sheer coincidence, we discovered it was from a small attic window in our own hotel — the Hotel Anker!**

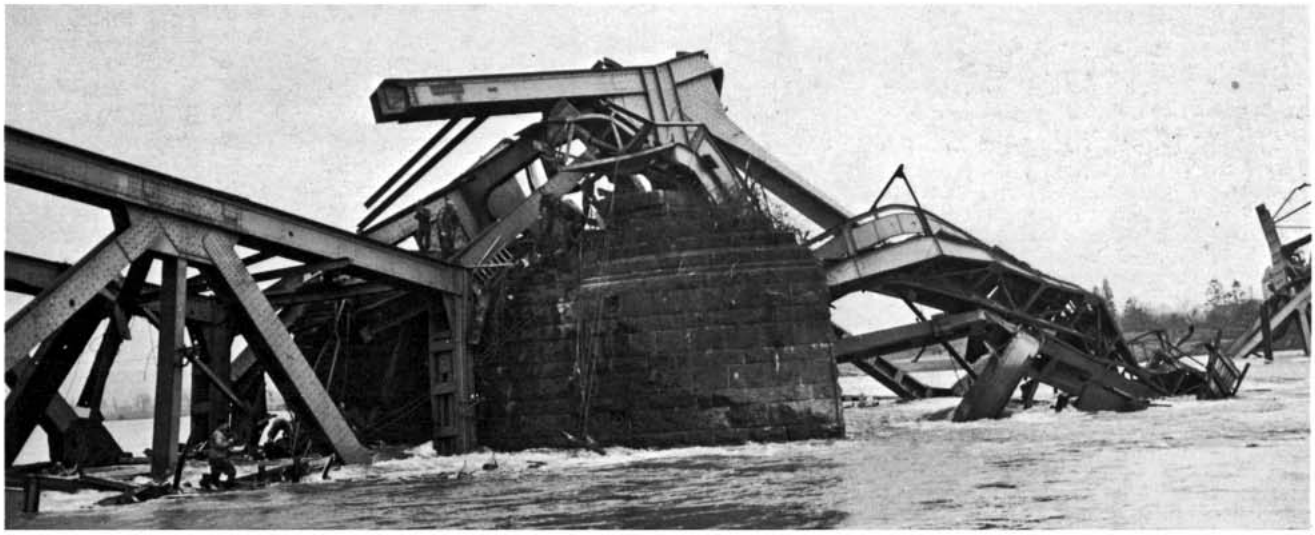


Above: **The second bridge upstream at Linz, seen from an L-4 liaison plane.**

This was completed in 29½ hours and open to traffic at midnight on the 11th. With these bridges supplementing the build-up, by March 13, engineers were able to close the Ludendorff bridge to effect the major repairs necessary to the section damaged by the German emergency demolition charge.

The Germans hit back at the bridgehead with every method available to them. The first, hasty counter-attack came on the night of March 7 when German engineers fought their way to the bridge with explosives only to be captured by American troops from the 79th Infantry Division. During the next two weeks, there were repeated attacks by the 9th and 11th Panzer Divisions.

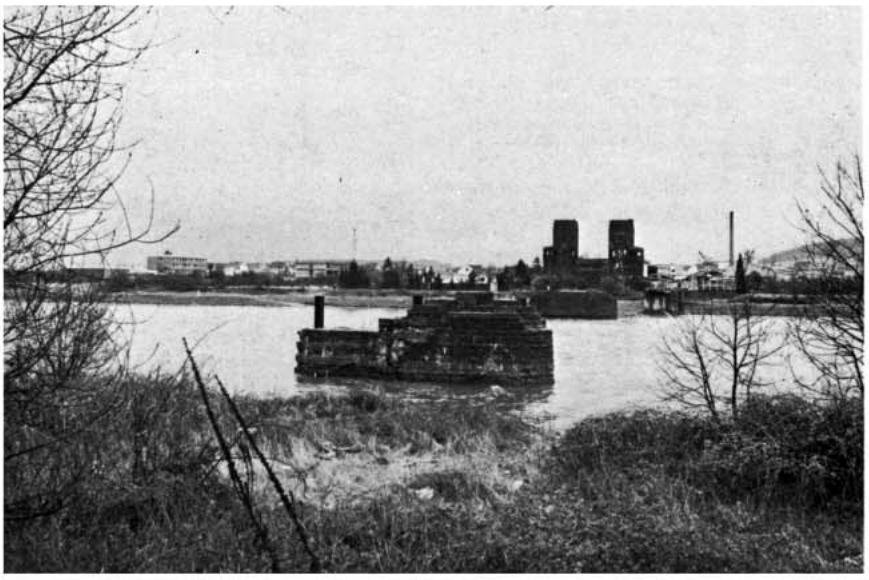
The first attempt by the Luftwaffe to destroy the bridge came when ten aircraft, eight of which were Junkers 87s, bombed it on March 8, the Americans claiming eight aircraft destroyed. As a result, American anti-aircraft defences were further increased and Remagen became the heaviest concentration of anti-aircraft troops and guns during the war. On March 15, the Luftwaffe lost sixteen out of twenty-one bombers on a raid on the main and secondary bridges. Altogether 367 German aircraft attacked the bridges during the first nine days of which 106 were destroyed.



The Germans also brought a 540mm gun, the Karl Howitzer, to bear on the bridge and, although no hits were scored, the two-ton shells exploding nearby no doubt further weakened the structure. Then on March 12, German rocket troops at Bellendoorn, Holland fired eleven V-2s at Remagen, the nearest landing 300 yards from the bridge, the furthest 25 miles away at Cologne!

As attempts by both the Wehrmacht and Luftwaffe failed to capture or destroy the bridges, Hitler called on his third remaining service, the Kriegsmarine. At 7.15 p.m. on March 17, six specially-trained frogmen entered the Rhine upstream and, using oil drums as support, began to float down with the current to place charges against the bridge.

The Americans had already foreseen that an attempt to attack the bridges using the river might be made and precautions had been taken to counter this threat. Initially, depth charges were set off in the bridge area every five minutes, although this tactic was discontinued once nets had been strung across the river. Additionally, riflemen, posted along the Ludendorff Bridge, had orders to fire at any suspicious objects. General Eisenhower had also authorised the use of the top secret, British-invented 'Canal Defence Light' (CDL) tanks. These tanks, each with a 13 million candlepower carbon arc, were used as searchlights to illuminate the river.



Top: **First Army Engineers photographed working on the repair of the bridge (US Army).** *Centre:* **US Army Signal Corps photographer Private Charles Herr, who was at the bridge when it collapsed, took this picture moments after the disaster, showing the attempts to rescue the trapped engineers.** *Above:* **The bridge-abutments still stand; almost a memorial to the 25 men that died in the collapse.**

The German swimmers floating downstream, commanded by Leutnant Schreiber, were spotted in the blinding lights of the CDL tanks whilst still some distance from the 51st ponton bridge at Linz. They were fired at from both banks and, one by one, were captured. It was a last brave attempt to destroy the bridge although, a few hours earlier, wear and tear had already done their job for them.

Since March 12 when the Ludendorff bridge had been closed, engineers, firstly from the 9th Armoured Engineer Battalion and latterly from the 276th Engineer Combat Battalion, had been working day and night to strengthen the bridge. However, the shock-waves from the exploding German projectiles, landing in the vicinity, coupled with the firing of 1,087 American 8-inch artillery rounds from the area, were not helping the engineers in their task. By March 17 the flooring had been largely repaired and several girders had been replaced. A number of suspension cables from the central arch of this lattice bowstring bridge had been spliced and work was beginning on the main damage above the eastern pier.

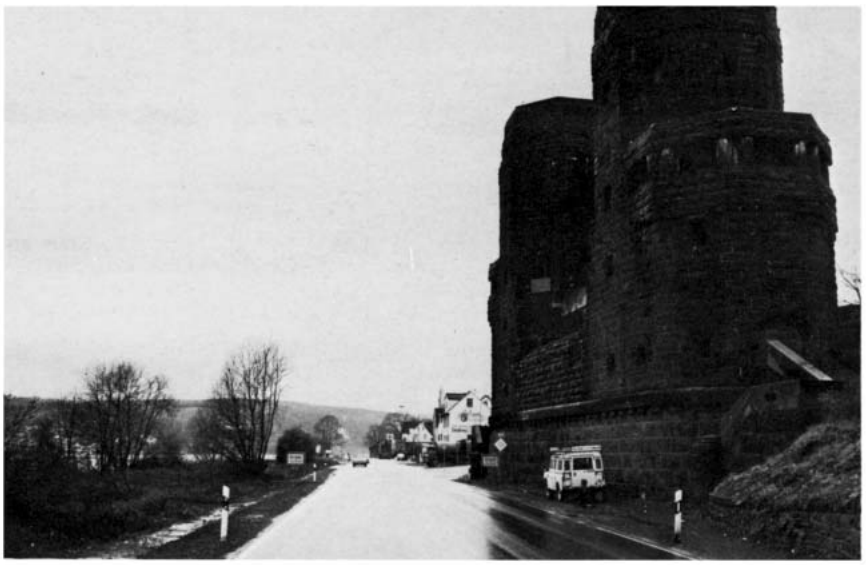
At 3.00 p.m. about 200 engineers were at work on the bridge. Suddenly there was a sharp crack followed by another and the bridge began to tremble. It was obvious to the men working on the bridge that it was about to collapse but the warning was too short. With a grinding roar the massive structure swayed and twisted before plunging into the Rhine.

'No one alive can say why the bridge collapsed,' Colonel Clayton A. Rust, 276th Engineers CO, said later. 'The bridge was rotten throughout, many members not cut had internal fractures from our own bombing, German artillery, and from the German demolitions. The bridge was extremely weak. The upstream truss was actually useless. The entire load of traffic, equipment and dead load were supported by the good downstream truss . . . It is my opinion as an engineer the collapse occurred as the result of vibrations caused by numerous possible sources, i.e., air compressors, one crane, a few trucks, several electric arc welders, hammering, and finally, but important, the not insignificant concussion of heavy artillery recently emplaced in the town of Remagen . . . I believe that, as the vibration continued, the condition of the previously buckled top chord was aggravated to such an extent that it buckled completely under a load which of course it was not designed to carry.'

Twenty-five men died when the bridge collapsed, eighteen bodies never being recovered, and a further three men died of injuries.

Although the Remagen bridgehead was being successfully sustained by the two tactical bridges which had been constructed, another floating Bailey bridge was quickly thrown across the Rhine in 36 hours by the 148th Engineer Battalion. This was situated about three hundred yards downstream from the 291st treadway.

Hitler, infuriated over the capture of the bridge intact by the Americans, sacked Feldmarschall von Rundstedt and summoned Feldmarschall Kesselring from Italy to succeed him. He ordered a drumhead court-



Top: **Medical Corps ambulances wait to pick up wounded engineers beneath the east-bank towers; the same ones from which the Germans had fought only ten days previously. Photo by T/4 Shannon, US Signal Corps.** *Above:* **Our Land-Rover beside Bundes-strasse 42. The entrances to the towers are now bricked-up.**

Corporal Kaufman's photograph of the bridge taken on March 17 1945 from the west bank (US Signal Corps).

Almost a comparison. The exact spot where Kaufman stood is now obstructed by a loading platform.

Left: The Stars and Stripes fly above the tower first entered by Mike Chinchar of Timmermann's No 1 platoon as the 276th Engineers begin dismantling the bridge (IWM). *Above:* One of the most exciting war-relics to be seen in Germany today . . .

martial to be set up and, subsequently, four officer scapegoats including Major Scheller were executed. Hauptmann Bratge, also sentenced to death, avoided execution as he was an American prisoner. Hauptmann Friesenhahn, also an American prisoner, discovered later, to his surprise, that he had been exonerated by the court.

When the war ended, the Ludendorff Bridge fell within the British zone and responsibility for its clearance rested with transportation units of the Royal Engineers in the 21st Army Group. The railway bridge formed a total obstruction to navigation and work started on June 23, 1945 using depth charges to blast a passage. By August 1, a channel had been cleared which was widened to 65 metres by August 31. Salvage work continued and, by 1948, all the steel members had been lifted from the Rhine.

In 1954, Ken Hechler, author of the impressively-researched book 'The Bridge at Remagen' revisited the site with Hauptmann Bratge. They found that the wooden plaque, which had been erected on one of the towers in memory of the engineers that died when the bridge collapsed, had been removed. Ken Hechler, as an official American ETO historian during the war, had interviewed Lieutenant Timmermann shortly after he had crossed the bridge and so had a unique opportunity to base his detailed book on first-hand accounts obtained at the time. Sadly, during his post-war research, he discovered that Timmermann had rejoined the army in 1948 and fought in Korea only to die of cancer in an army hospital in 1951.

. . . but for how long? Construction work now under way on the western approach.

Over the past five years, we have visited Remagen five times. Up until 1975, the site remained largely as it had been left after the bridge was cleared. It was decided by the German Bundesbahn authorities that a rail crossing at Remagen was no longer required

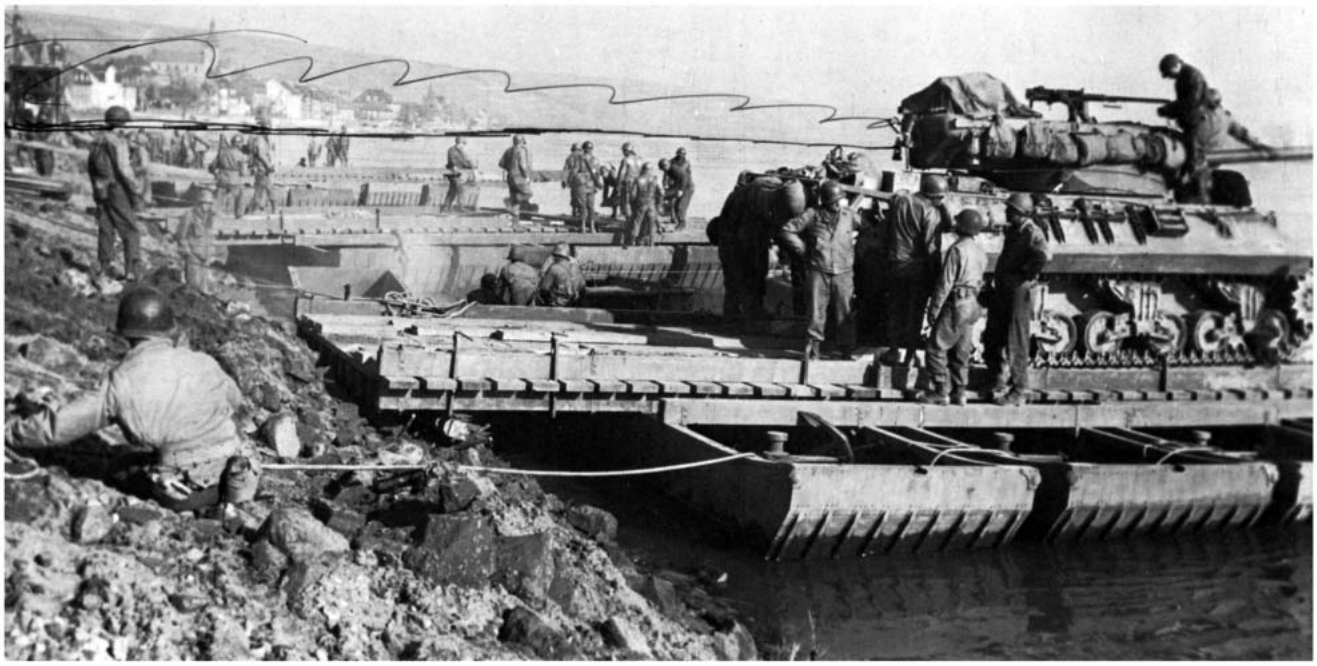
and the bridge was not rebuilt. The railway track was therefore removed, although on one trip, we were lucky enough to be able to salvage a wooden sleeper; a unique relic over which men fought and died to cross the Rhine

Year by year, more new buildings appeared on the western bank and the narrow lane leading past the bridge approach was widened into a busy road. In 1976 the bridge supports were dismantled and by March the following year the railway embankment on the western side had been removed. Then in March 1978 the Remagen mayor, Hans Peter Kürten, announced the launching of his idea to raise funds for a Remagen museum by selling suitably authenticated pieces of stone from the old piers. The scheme was so successful that on March 7, 1980, the 35th anniversary of the bridge's capture, the memorial museum was opened in the towers on the western bank.

Today, one crosses the Rhine with a vehicle via a ferry about a mile upstream at Linz using a slipway near the one used by the 51st Engineers for their ponton bridge. On the eastern bank the area remains unchanged, as our photographs show. The railway tunnel was blocked off when the decision was taken not to rebuild the bridge, and it now contains instruments for measuring the movement of the earth's crust. Smashed rock lies around in abundance, loosened by the shelling of the Erpeler Ley cliff. The cliff-top gives a marvellous overall view of the bridge site and the route taken to capture it.

In March 1975 we followed in detail the route taken by Lieutenant Timmermann's unit from Stadt Meckenheim (now just called Meckenheim) to Remagen. The small villages of Fritzdorf, Oeverich, Niederich, Leimersdorf and Birresdorf bear no traces of the old skirmishes. The Waldschlösschen still stands and, following in the footsteps of the 27th Armoured Infantry exactly thirty years before, we turned the last bend to overlook the Rhine. The scene was the same except for the bridge—its position marked only by the piers protruding from the busy river.

Above: **Remagen on March 20, 1944. In the foreground, the 148th Engineers' Bailey bridge.** *Below:* **The peaceful river in March 1975, photographed from the balcony of St. Apollinaris church.**



General Patton steals the glory

By the third week of March 1945, the Allied armies had reached the west bank of the Rhine throughout its length and held the unplanned bridgehead on the east bank at Remagen.

The master plan for the Rhine crossing had been approved some months previously by General Eisenhower. This was to take place just north of the Ruhr in a huge air and land operation due to take place on the night of March 23-24 under the command of Field-Marshal Montgomery. As always, the Field-Marshal's planning was meticulous, detailed and necessarily lengthy.

One hundred and fifty miles to the south, the US Third Army had closed the Rhine after a victorious campaign in the Saar-Palatinate triangle led by the formidable General George S. Patton. The General had already been given permission to cross the Rhine by General Bradley, Commander of the 12th Army Group, on March 19. With the glory of the first crossing of the Rhine having gone to a unit of the First Army, Patton was determined that the first assault crossing should be made by the Third. Before the Saar-Palatinate battle had been won he was busy moving bridging equipment, assault boats and other engineer material up to the Rhine. He was aware that Montgomery was scheduled to cross during the night of March 23; Patton therefore decided to steal his thunder and cross on the 22nd.

Patton told Major-General Manton S. Eddy, commanding XII Corps, to make a feint at Mainz while actually crossing the Rhine ten miles further south at Oppenheim. When, on the morning of March 22, General Eddy told Major-General S. LeRoy Irwin, 5th Division commander, that Patton had ordered a crossing of the river to be made that night, Irwin protested that a well-planned orderly operation could not be carried out that quickly. All that could be done, he said, was to 'get some sort of bridgehead'. This was all Patton wanted. By late morning, the 5th Division's 11th Infantry Regiment had been singled out for the assault.

In spite of the rush, Patton's advance preparations proved adequate. Nearly 500 boats and 7,500 engineers were on hand to assist the 11th Infantry. Two crossing points were selected for the two battalions which were to spearhead the attack: the 3rd Battalion was to cross at Oppenheim whilst the 1st Battalion would cross a mile or so to the north at Nierstein. Unlike the large, preparatory artillery barrage with which Montgomery preceded his attacks, Patton ordered a surprise attack against, he hoped, an unsuspecting enemy.

Top: **A censored photograph of Third Army troops preparing to raft a tank destroyer across the Rhine at Nierstein on March 23 (US Signal Corps).** *Above:* **The gravel dump now marks the west bank approach to the ponton bridge constructed later on the 23rd.**

At 10.30 p.m. on March 22, the leading boats of Company K left the west bank of the Rhine at Nierstein. All was quiet. The first boat to touch down on the far bank contained the Company Commander, 1st Lieutenant Irven Jacobs, who was followed quickly by the rest of his men. Seven surprised Germans promptly surrendered and obligingly paddled themselves back to captivity without a guard!

Upstream at Oppenheim, Companies A and B of the 1st Battalion did not receive quite the same welcome. While the boats were crossing, a German machine gun opened up on them, but, after a brisk, thirty-minute battle, the Germans surrendered. The entire 11th Infantry assault crossing had cost the Americans precisely twenty casualties, and by midnight, all the 11th Regiment were across. During the morning, tanks and tank destroyers had been ferried across and, by late afternoon, a Class 40 treadway bridge had been completed at Nierstein. By the time the long-awaited Rhine crossing was beginning in the north, Patton's 5th Division bridgehead was five miles deep and the important road-junction of Gross Gerau was only a mile away.

General Patton had telephoned the news of the successful crossing to General Bradley at breakfast time. 'Brad, don't tell anyone but I'm across' said Patton 'I sneaked a division over last night. But there are so few Krauts around there they don't know it yet. So don't make any announcement — we'll keep it a secret until we see how it goes!'

During the morning, Patton's liaison officer at 12th Army Group HQ could not conceal his smile as he announced that, 'Without benefit of aerial bombardment, ground smoke, artillery preparation and airborne assistance' (giving a direct dig at Monty) 'the Third Army at 2200 hours, Thursday evening, March 22, crossed the Rhine River.'

General Patton timed his announcement to the world carefully. Just hours before Field-Marshal Montgomery's crossing began he phoned Bradley again: 'Brad' he shouted 'for God's sake tell the world we're across . . . I want the world to know Third Army made it before Monty starts across!'

Unfortunately Field-Marshal Montgomery did not publish his thoughts when he heard the news of Patton's triumphal announcement and Winston Churchill, calling it 'unpremeditated', gives it only one sentence in his six volume history of the Second World War.

When Patton arrived at the Nierstein crossing site (always incorrectly stated as being at Oppenheim) on March 24, his ADCs Colonel Charles R. Codman and Major Alexander Stiller, were with him as he crossed the bridge. 'Time out for a short halt,' Codman reports Patton as saying. Then the General walked to the edge of the bridge and surveyed the slow-moving surface of the river. 'I have been looking forward to this for a long time,' the General said, unbuttoning his trousers and straightaway showing his disdain for the mighty Germany Empire by relieving himself into the Rhine.

Reaching the far side where the grassy bank had been churned up, as the history-minded Patton stepped off the last ponton, he deliberately stumbled onto the soft ground in an imitation of William the Conqueror (who is supposed to have said as he fell flat on his face as he stepped out of his boat, 'See, I have taken England with both hands'). Patton, kneeling, steadied himself against the bank with both hands and, rising, opened his fingers to let two handfuls of earth fall, exclaiming: 'Thus William the Conqueror!'

Above: **This is the bridge from which Patton performed. Photo by Pfc J. P. Musae, US Signal Corps.** *Below:* **Although the west bank approach is now occupied by a 'Sand baggerei' the east bank, where Patton stumbled ashore, remains as it was in 1945.**

Above: **March 1977 — thirty-two years after the event. 'Thus General Patton!'**

This is the posed, official picture illustrating General Patton's gesture when he crossed the Rhine via the ponton bridge at Nierstein.

This picture, acknowledged to be authentic, was first publicised by Lou Varrone in 'Static Line' (a US veterans' newspaper) in April 1975.

Our reconstruction (on the exact spot!) was made with the helpful assistance of the Nierstein Wasserpolizei. In the background Nos 9-15 Rheinallee.

OPERATION PLUNDER

The major assault

Operation Plunder was the name assigned to the mammoth operation masterminded by Field-Marshal Bernard L. Montgomery for the Rhine Crossing. Under his command his total forces, British and American, totalled twenty-nine divisions including two Airborne — more than a million men. These divisions came from three national armies: the American Ninth; the British Second and the Candian First and they were to cross the river from south to north, between Duisburg in Germany and Emmerich in Holland, in that order.

21 ARMY GROUP PLAN

Ninth United States Army

The task of Ninth United States Army was to assault across the Rhine in the area of Rheinberg and to secure a bridgehead as follows: junction of the Ruhr and Rhine rivers Bottrop-Dorsten; thereafter to be prepared to advance to the general line both inclusive Hamm-Münster. the army task included the protection of the right flank of Second Army.

Ninth United States Army bridging operations were to be centred on Wesel after its capture by Second Army.

Second Army

The task of Second Army was to assault across the Rhine in the area of Xanten and Rees and to establish a bridgehead as follows: exclusive Dorsten — all inclusive Borken-Aalten-Doetinchem-Hoch Elten feature. Subsequently, it was to advance on a three corps front north-east towards Rheine.

Second Army bridging operations were to be centred on Xanten and Rees.

First Canadian Army

The initial tasks of First Canadian Army were to assist in broadening the apparent frontage of assault by carrying out feints along the Rhine to the left of Second Army, and to hold securely the line of the rivers Rhine and Maas from Emmerich westwards to the sea. Later, it was to be prepared to advance into eastern Holland and to protect the left flank of Second Army.

Bridging operations centred on Emmerich, were to be carried out after the bridgehead had been secured by Second Army.

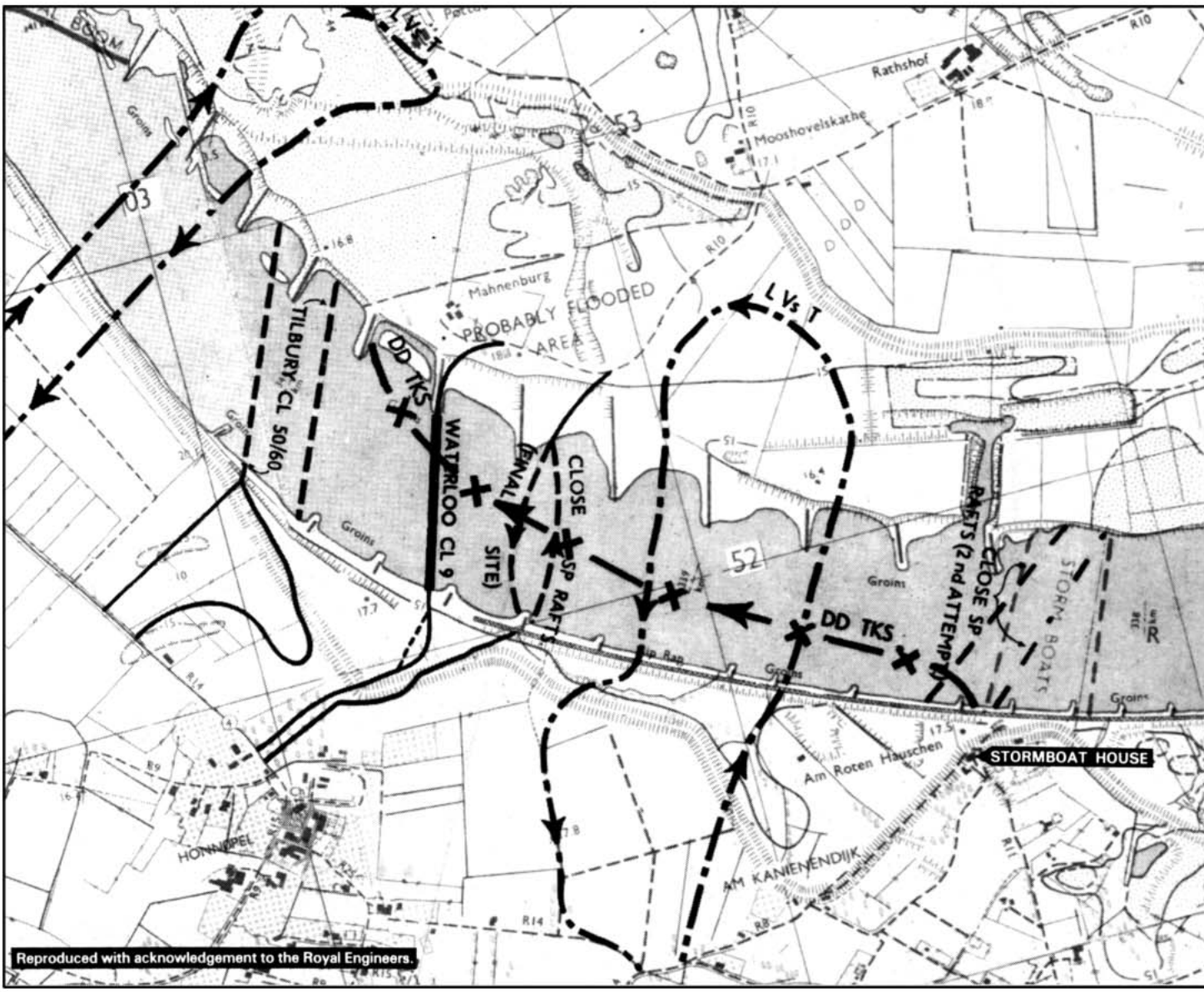
The most comprehensive road-net on the Allied bank was concentrated in the British Second Army sector; it was therefore decided that the main effort to cross the waterway should be centred in this zone. However there was considerable acrimony from the American Ninth Army Commander, Lieutenant-General William H. Simpson, when he found they were only to play a supporting role on the right flank and Field-Marshal Montgomery's initial orders were modified to give the American forces the opportunity to use their tremendous resources to the full. The US Ninth Army were also ordered to assist the Second British Army with bridging and road maintenance in the area leading to the crossing points.

The main Royal Engineers dump of bridging equipment, (the speedy erection of bridges was paramount to exploit the initial crossings) was already ideally located only eighteen miles away at Goch. By March 19 this dump contained 25,000 tons of bridging equipment which was still increasing at the rate of 600 tons per day. Two forward assembly areas close by the river were named after well-known London stores 'Selfridges' and 'Gamages'. The whole build-up programme was screened from the German

Above: **Field-Marshal Montgomery visited General Simpson's Ninth Army HQ in Mönchen-Gladback on March 21, 1945, to run over the final details for Operation Plunder (IWM).** *Below:* **We had a real job finding the location of the HQ and, after four hours searching, found it on Hohenzollernstrasse, now the local court house.**

TIMINGS FOR THE FIVE SEPARATE OPERATIONS OF PLUNDER

Corps	*Codeword*	*Formation*	*Task*	*H Hour*
30 Corps	TURNSCREW	51st Highland Division	Assault on Rees	2100 hrs 23 March
12 Corps	WIDGEON	1 Commando Brigade	Assault on Wesel	2200 hrs 23 March
	TORCHLIGHT	15 Scottish Division	Assault in area Xanten	0200 hrs 24 March
XVI United States Corps	FLASHPOINT	30 United States Division	Assault South of Wesel	0200 hrs 24 March
		79 United States Division	Assault South of Wesel	0300 hrs 24 March
XVIII United States Airborne Corps	VARSITY	6 British Airborne Division and 17 United States Airborne Division	Airborne landings in area Diersfordt	1000 hrs 24 March

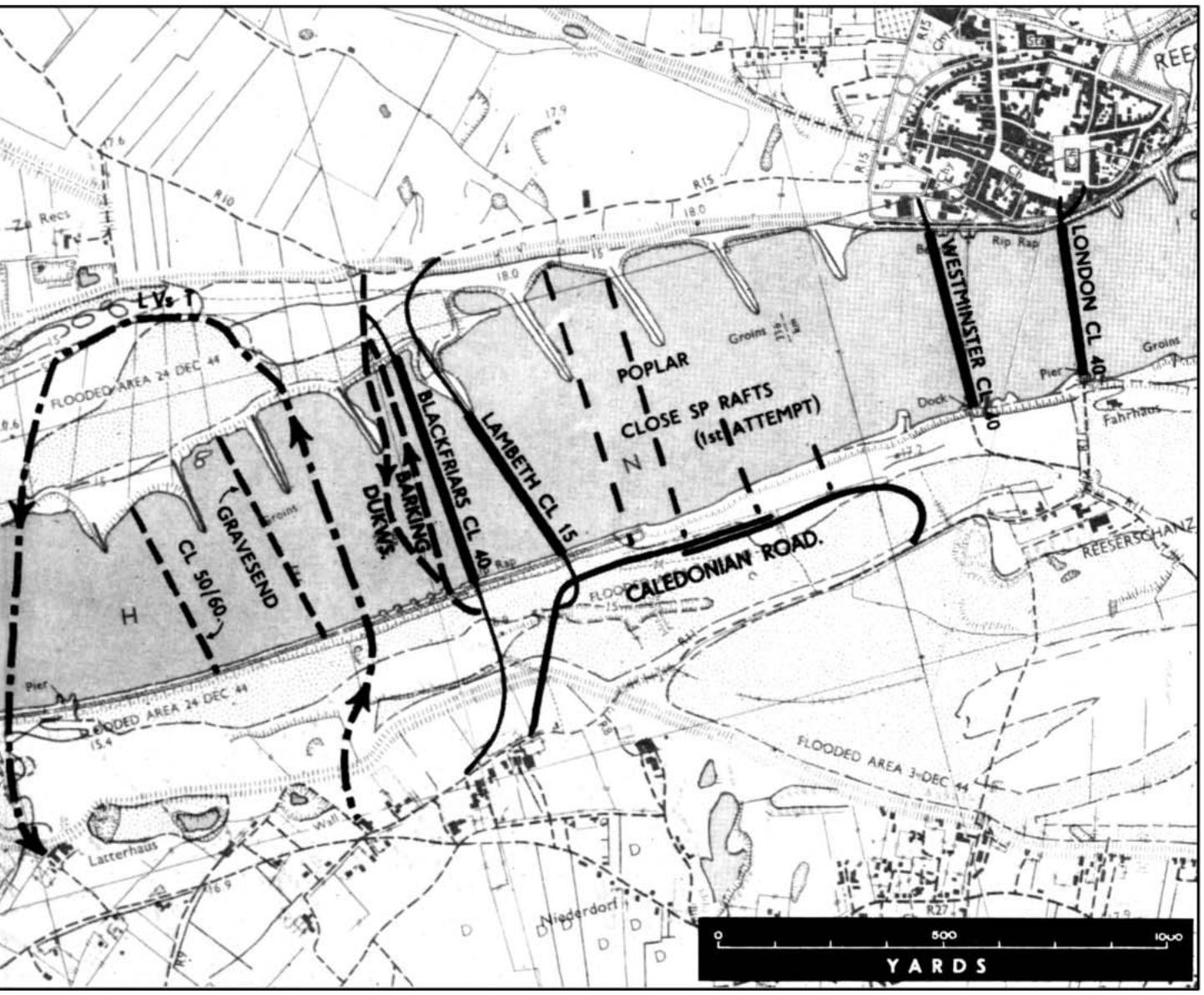


bank by smoke-screens along fifty-miles of the river. Information on the state of the river from Basle to Nijmegan was provided by the Flood Prediction Section, which had been set up on December 15, 1944, at the US Army ETO HQ.

The focus of the assault was the capture of Wesel, an important road and rail junction, although both the permanent bridges across the Rhine at this point had been blown by the Germans. As the assault points were located about four miles north and south of the town. Commandos were to cross the river close to Wesel and secure the town for the arrival of the main force.

In order to isolate the bridgehead from the rest of Germany, a heavy bombing programme 'Interdiction of Northwest Germany' had been in progress since mid-February. Additionally two Airborne divisions were to be dropped inland to prevent the Germans from bringing up reinforcements to oppose the crossings. As these paratroopers and glidermen would be exposed to the heavy artillery fire (from the Allied bombardment softening-up the eastern bank) were they to drop co-incidental with the initial assault

The largest smoke screen in history preceeded the crossing — Anker-Rolandseck *(left)* is over 80 miles to the south! (US Army).



crossing, a novel plan was adopted. The Second Army Commander, Lieutenant-General Sir Miles C. Dempsey, suggested that the airborne troops should follow-up the crossing (which was to take place at night) the following morning.

Field-Marshal Montgomery had also planned to use what was termed 'movement light' in the operational orders at the time. Using CDL tanks (which had recently been employed for the first time at Remagen to such good effect) shining their beams on the sky, he created what was quickly dubbed by the troops 'Monty's Moonlight'.

At 7.30 p.m. on the evening of March 23, 50 GHQ Troop, Royal Engineers began to construct Caledonian Road, a two-way track along the edge of the Rhine opposite Rees to give access to the close support raft ferry and Bailey bridge sites which were to be set up in the area. A gap was blown in the dyke at 8.00 p.m. and the engineers began laying channel track along the 1,700 yard length of the road while a Sommerfeld track service-route provided access at the eastern end. During its construction, pioneers had to carry 60 tons of stores 400 yards by hand during the night.

Above: **Sergeant Travis photographed these DUKWs in Sonsbeck, part of the pre-crossing build-up on March 23 (IWM).**

Left and above: **Royal Engineers of 70 Field Coy transport assault craft along Rotes Hauschen to 'Stormboat House' at Honnopel.**

The preliminary shelling of the German bank, which had begun at 6.00 p.m. by 3,500 guns, increased to a tremendous barrage as H-Hour approached. At 9.00 p.m. the leading elements of the 51st Highland Division entered the water in Buffaloes, assault boats and DD Shermans. Seven minutes later word was received of successful landings on the eastern bank. Successful crossings continued to be made by the LVT ferries, the silted exits on the far bank making it easy for the amphibians to leave the water. The heavier DD tanks, however, did have difficulty and became bogged down and it was not until a carpet was laid that the leading tank left the Rhine and began towing out the others. By 6.00 a.m. two troops of tanks had safely reached the eastern bank.

Follow-up troops crossed in stormboats and, by 9.45 a.m., all three brigades of 51st Highland Division were across. It was taking about 55 minutes to ferry a battalion across the river. German resistance had not been strong at first but sniping, shelling and mortaring increased during the morning. By midday the 1st Gordons were up against stiff opposition from self-propelled guns in the centre of Rees.

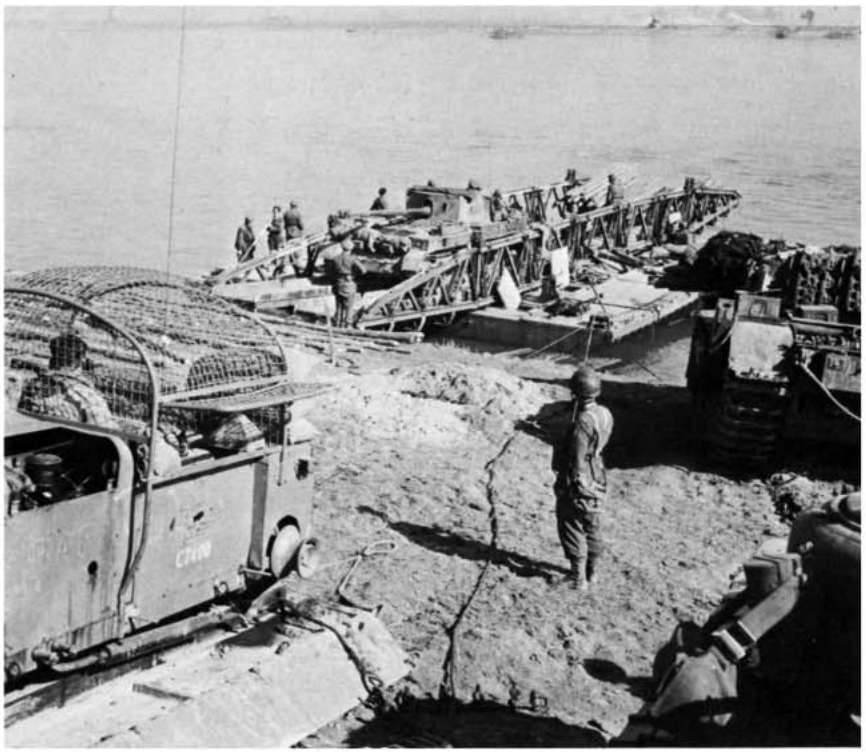
'TILBURY' CLASS 50/60 RAFT FERRY

In order to speed up the build-up, REs crossed immediately after the assault waves to reconnoitre and prepare sites for the close support raft ferries. Initial reconnaissance was made difficult with the discovery of scattered mines on the far bank and some of the planned exit sites were found to be too boggy. Captain R. H. Stafford, a troop commander from 617 Assault Squadron, RE, discovered the planned exit for Tilbury, a Class 50/60 ferry, was already occupied by eight bogged DD tanks. Nevertheless, shortly after midnight, REs began to construct Tilbury raft. As soon as an alternative landing site had been examined and found to be free of mines, a Buffalo took across the cable and, by 6.00 a.m., the first bulldozer was winched across. This 'dozed out a causeway and logs were rafted over to make a hard road.

About 8.00 a.m., urgent messages reached Major R. E. Wood, 617 Squadron Commander, to get an armoured recovery vehicle across to pull out the immobile DDs. The exit road was not yet completed but, by tremendous effort, the first load in Second Army crossed the Rhine at 9.00 a.m.

'POPLAR' CLASS 9 RAFT FERRY

Meanwhile a Class 9 ferry called Poplar was being constructed throughout the night close by Caledonian road and, being close to Rees, it came under accurate German fire at dawn. Casualties to the REs working on the site



Above: **A Valentine 'Archer' SP gun of the 61st Anti-tank Regiment of the Highland Division on Tilbury Class 50/60 raft, photographed by Sergeant Palmer on March 24. Note the balloon winch in the foreground (IWM).** *Below:* **A Bedford 3-tonner leaves Poplar Class 9 Ferry — photo by Lieutenant Handford on March 24 (IWM).**

mounted so it was decided to move the raft site a couple of hundred yards downstream away from Rees. Shellfire still continued to make the site dangerous and several rafts were hit. A further move was made about 2,000 yards further downstream. Although some rafting was possible, a suitable site was finally established near Honnopel.

'GRAVESEND' CL 50/60 RAFT FERRY

Because the proposed site for the second Class 50/60 raft ferry, Gravesend, was under observation from Rees, work could not commence at the site until 11.00 a.m. Two rafts had been completed by 5.00 p.m. and winching began as soon as it was dark. One ferry was sunk during the night by a German aircraft but, by 4.30 a.m. on March 25, it had transported 26 tanks, 10 tracked vehicles and 17 other vehicles across the Rhine.

'BARKING' DUKW FERRY

As soon as it was light on March 24, REs had also begun work on the entrances, exits and approaches to the Barking DUKW ferry close by the western end of Caledonian Road. Here the bank had to be lined with Sommerfeld track on chespale to enable the wheeled DUKWs to enter the Rhine. By 10.15 a.m. the first DUKW crossed the Rhine in close support of the troops attacking Rees.

'LAMBETH' CLASS 15 BAILEY BRIDGE

Five bridges were planned across the Rhine in the Second Army sector and work began on the first, a Class 15 low-level Bailey called Lambeth bridge, in the afternoon of March 24. Lambeth had originally been planned as a Class 12 but alterations were made to increase its strength to cope with medium artillery, recovery vehicles and armoured cars. Because the site was in full view of Rees, there was much interference from shelling and casualties mounted. Parts of Rees were still in German hands and the 1st Gordons could not clear the eastern river bank until 1.15 p.m. on the 25th. During the morning, a smoke screen had enabled work to re-start on Lambeth bridge. It had been estimated the bridge would take 17½ hours to construct. However because of enemy shelling and an unfortunate mishap near completion of the bridge (when a naval landing craft got out of control, hit the bridge and swung the end 26 feet downstream), the construction took 41½ hours. The 1,206ft bridge was opened to traffic at 8.30 a.m. on March 26.

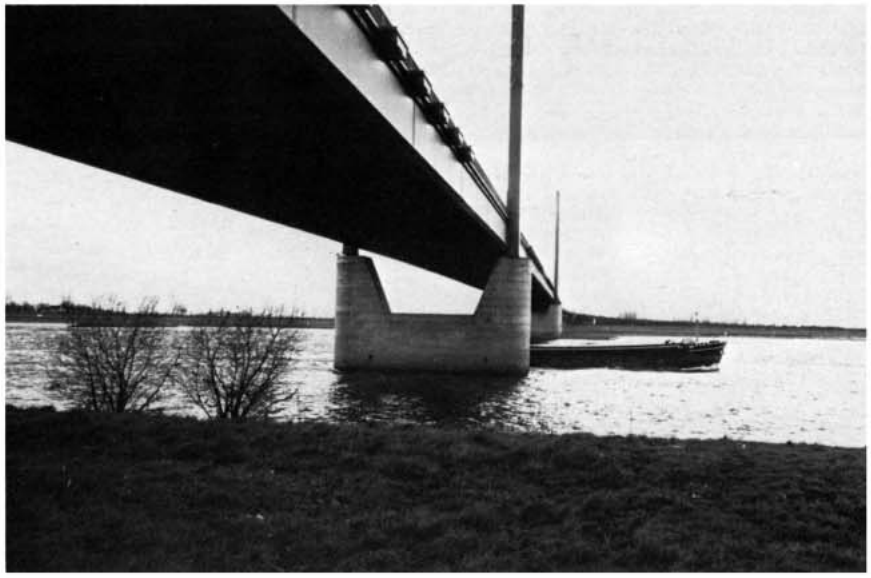
'WATERLOO' CLASS 9 FOLDING-BOAT BRIDGE

At 8.00 a.m. on 25th, work began on Waterloo folding-boat bridge near Honnopel. The site for this bridge had been moved further westwards, round a bend in the river, because of the German fire near Rees. The new site was on the skew across the river and ended on a 600ft groyne on the east bank. This saved 500ft of bridge and cut the overall length to 1,300ft. A smoke-screen during the hours of daylight helped to keep shelling to a minimum and the bridge was completed three minutes before midnight on March 25.

During the night a fully-loaded Class 9 close support raft from the new rafting site hit the bridge damaging two folding-boats which had to be replaced. Later on March 26 a fully-loaded Class 40 raft hit Waterloo and the bridge had to be cut to free it.

As the bridge was to be designated as a Class 9, orders were given that White scout cars and half-tracks were not to use it and a minimum spacing of 200 feet was enforced between vehicles on the bridge. It continued in service for a week before being dismantled.

Above: **A Carrier crossing the Rhine via Lambeth Class 15 Bailey bridge (IWM).** *Below:* **By careful comparison of the map on pages 16/17 and the aerial picture of Rees on page 20, our readers will see that this is the present-day site of Lambeth bridge.**



Left and above: **A censored photograph of the lightest bridge built at Rees, Waterloo Class 9 (IWM) with the same site today.**

'LONDON' CLASS 40 BAILEY BRIDGE

It was imperative that the planned heavy Bailey bridges be constructed and brought into use as soon as possible but, with Rees still in German hands, no work could begin during March 24. That night REs began to construct floating bays for London Bridge in the lagoon on the western bank upstream from Rees. This was to be a Class 40 bridge running straight into Rees itself, a distance of 1,174ft and work began on site at 7.00 p.m. on March 25. Assembly continued throughout the next twenty-four hours and the bridge was finally opened at 11.00 p.m., March 26.

'BLACKFRIARS' CLASS 40 BAILEY BRIDGE

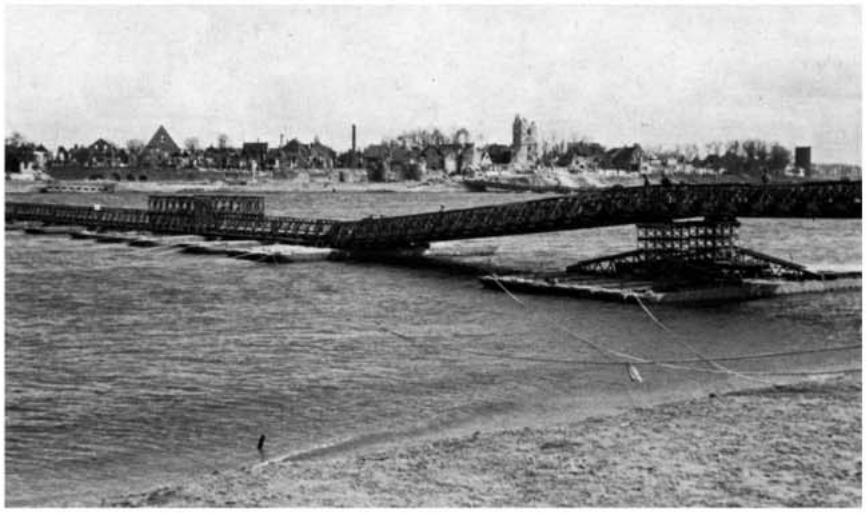
An hour earlier, Canadian Engineers had begun work downstream at the Barking DUKW site on the construction of their own bridge, Blackfriars, for the exclusive use of the 2nd Canadian Corps, which had the task of clearing the eastern bank as far north as Emmerich. This low-level Bailey bridge was located just beside Lambeth; it was the longest in Second Army sector at 1,744 feet and was opened to traffic at midday on March 28.

Top: **The new bridge at Rees on the site of Lambeth Class 15.** *Above:* **All the bridges at Rees were named after those across the Thames — this is the Class 40 London bridge (IWM).** *Below:* **This is the only bridge site where the approach (seen here on the western bank) still remains.**

Although Blackfriars Class 40 Bailey has long since disappeared, we found this ammunition box, *above*, just beside the old east bank approach (IWM).

'WESTMINSTER' CLASS 40 BAILEY BRIDGE

Westminster bridge was to be built by 6th A Troop Engineers, RE, who had been operating the initial stormboat ferry. It was the last bridge to be built in this sector and had to wait its turn for transport to bring up its supplies. However the delay was all to the good. Because the initial, stiff resistance in Rees had forced Waterloo bridge to be constructed downstream at Honnopel, this left the original Waterloo site, on the western outskirts of Rees, clear. It had ready-made approaches on the east bank and the troops operating the stormboats had been able to get a good night's rest before work could begin. Westminster was to be a high-level Bailey pontoon bridge, 1,402 feet long and had to cater for a difference in water level of 22 feet. Construction began at 11.00 a.m. on March 26 and, with the advantage of a perfect site, the job was finished well within the scheduled time. It was ready for traffic at 6.00 p.m. on March 29 and, the following morning, General Dempsey officially opened the bridge as a token of the completion of the Rhine bridges in his sector.



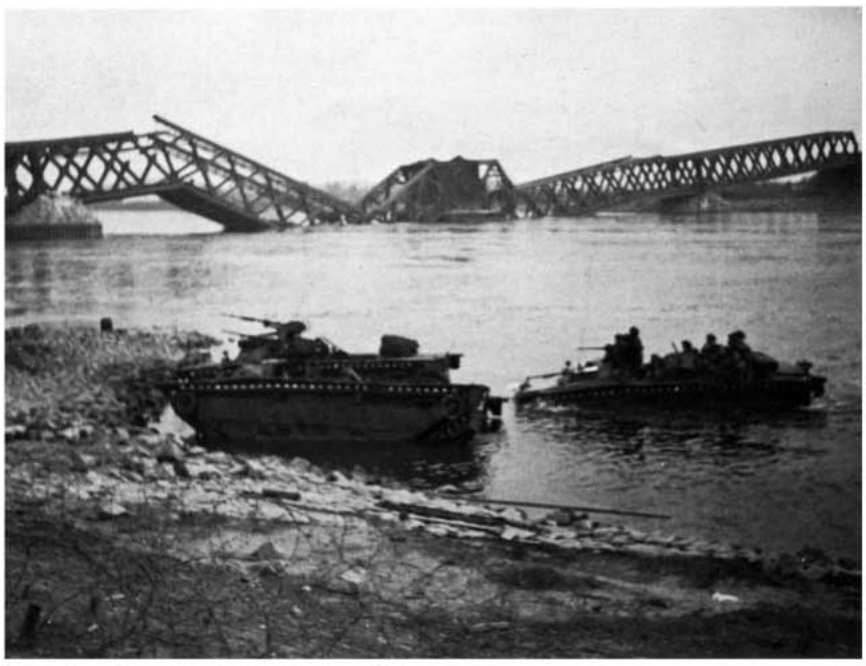
Above: **Westminster Class 40 Bailey (IWM).** *Below:* **Rees was badly damaged during the fighting and was extensively rebuilt post-war including the church, now with twin-towers.** *Below left:* **Lieutenant-General Dempsey cuts the tape in a manner rather different to General Patton's style for opening bridges illustrated on page 40.**

Further upstream, the 15th Scottish Division crossed the Rhine opposite Xanten at 2.00 a.m. on March 24 in Buffaloes and stormboats. Although the German defenders were not nearly so determined as those at Rees, the far bank of the river proved an awkward hazard. The bank was stone-lined for more than a mile-and-a-half and the Buffaloes could not climb it. The four assault battalions became widely separated and the following stormboats were exposed to undiminished fire.

Three miles or so to the east, the Commandos had crossed west of Wesel. At 10.00 p.m., No. 46 (Royal Marine) Commando led the 1st Commando Brigade (its CO being Brigadier D. Mills-Roberts of Dieppe 'Hess' battery fame *see After the Battle No. 5*) across the Rhine in Buffaloes. The first man ashore was Captain J. D. Gibbon commanding 'B' Troop, one amphibian being hit and bursting into flames on the way across. No. 6 Commando, meanwhile, were crossing in stormboats several of which received hits from the Germans defending the river bank.

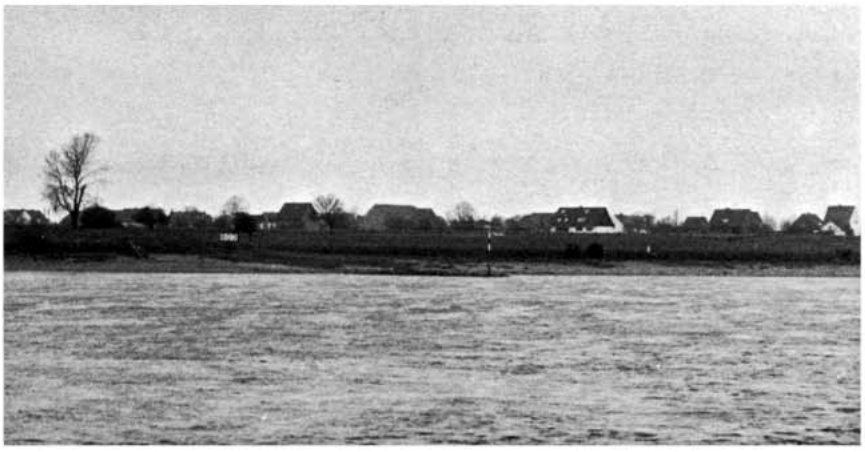
The Commandos advanced to within a thousand yards of the town where they halted while 200 aircraft from RAF Bomber Command dropped 1,100 tons of bombs on the objective. As soon as the last bomb had fallen, the brigade advanced having already killed or captured over 100 of the defenders.

The battle for Wesel continued throughout the 23rd, the Commandos being reinforced during the day by the 1st Battalion of the



Above: **Buffaloes land the 1st Battalion of the Cheshire Regiment, which crossed the Rhine to the east bank beside the blown Wesel rail bridge on the afternoon of March 24, in support of No 1 Commando (IWM).**

Above: **Troops of the 120th Infantry Regiment in their assault craft at Rheinberg with our comparison,** *below,* **of the same area today (US Signal Corps).**



Cheshire Regiment and men of the American 17th Airborne Division. Brigadier Mills-Roberts discovered his HQ was only a hundred yards from that of the German commander of the Wesel Division, Generalmajor Friedrich Deutsch, who was killed later on in the day. The last defenders were finally eliminated by the evening of March 25. The Commandos had captured over 850 prisoners, killing several hundred of the enemy for the loss of only eleven men wounded, seventeen missing and sixty-eight wounded.

At 2.00 a.m., at the same time that the 15th Scottish Division were crossing at Xanten, the US Ninth Army began its assault south of Wesel. The American barrage, from 2,070 guns, had begun at 1.00 a.m. and, during the sixty minutes preceeding H-Hour, 65,261 rounds were fired at the German bank. The Ninth assault was carried out in two phases by the 30th and 79th Infantry Divisions.

All three 30th Infantry Division regiments participated in the assault in its sector: the 119th Infantry just south east of Büderich; the 117th Infantry further south near Wallach and the 120th two miles further upstream near Rheinberg. The assault was a complete success and only two 119th boats were hit. 'There was no real fight to it' noted 1st Lieutenant Whitney O. Refvem of the 117th Infantry, 'the artillery had done the job for us'. Within two hours of the crossing, all three regiments had two battalions across and the first line of villages had been captured. Engineers immediately began the construction and improvement of approach roads.

In the 79th Infantry Division sector further south (just to the north of Walsum/Orsoy) the assault was carried out by the 315th and 313th Regiments. Because the crossing point was about three miles to the south and east from that at Rheinberg, the timing of the assault was delayed by one hour. It was hoped this would give the 30th Division time to advance to secure the left flank and avoid exposed inner flanks for both divisions. At 3.00 p.m., the two assault battalions made their crossing, hampered to an extent by the build-up of the smoke-screens and early morning fog. Some boats found difficulty in holding course, one or two even arriving back on the west bank. The GIs charged ashore only to meet more Americans coming forward to reach the river! However once the troops reached the German bank, the landing proceeded well and, within forty-five minutes, the two battalions were moving east against little opposition. The pre-assault barrage had completely demoralised the defenders as it had been perfectly timed to lift only when the boats were three-quarters of the way across.

Troops of the 79th Division ferrying a jeep across the Rhine at Orsoy on March 24.

Shortly before 10.00 a.m. on the morning of the crossing, troops all along the front heard the drone of hundreds of aircraft approaching from the west. Operation Varsity — the airborne drop by the British 6th and the US 17th Airborne Divisions had begun. The British aircraft had flown direct from England rendezvousing over Wavre (in Belgium) with the Americans flying from airfields around Paris. The total force numbered 17,000 men with 600 tons of ammunition and 800 vehicles and guns — all were transported in 1,500 aircraft and 1,300 gliders.

Paratroopers dropped first followed by gliderborne troops with the object of securing the bridgehead to protect the crossing sites from German counter-attack. Eight bridges over the Issel river (forming a boundary to the bridgehead area about five miles east of the Rhine) were secured, two by coup-de-main parties landing accurately close to their targets.

Top: **British airborne troops advancing along the Mehrhoogerstrasse (just passing Weststrasse on the left) to Hamminkeln. Photo by Sergeant Christie (IWM).** *Above:* **The same road junction today on the western outskirts of the town.**

Left and above: **Gliders abandoned in the fields to the east of Hamminkeln (IWM). Today the same railway track is overgrown and a new industrial estate has been built on the landing zone.**

Left and above: **On March 25, Sergeant Christie photographed the remains of a glider which had crashed into the town station, probably being cleared away by this group of prisoners (IWM).**

Left: **Monty in Marienbaum, photographed by Sergeant Morris on March 25, having a roadside conference with the Commander of 30 Corps, Lieutenant-General B. G. Horrocks (IWM).** *Above:* **Editor and son confer on the same spot, March 25, 1975.**

German anti-aircraft fire successfully brought down forty-four transport aircraft and over fifty gliders during the two-and-a-half-hour operation. The German defensive fire caused many parachutists and gliders to land in the wrong places and battles raged all over the dropping zones, although by nightfall all organised resistance west of the river Issel had been overcome and contact made with the ground forces.

Although the mammoth Operation Plunder was planned by SHAEF to be the initial crossing of the Rhine it was not, as we have seen, the first assault crossing, neither was it the last. Nevertheless it remains the major operation and we spent a considerable time driving up and down the river banks in search of our comparisons. One can only cross the river at Rees or Wesel today. Bridges and bridging are the cornerstone to the crossing of the Rhine but, in spite of the fact that we had a detailed map giving the exact locations of the various bridging sites in the Second Army sector, there remains nothing on the ground to indicate their positions today. Only at the London bridge site is the old approach road still visible on the eastern bank. Between Westminster and Lambeth bridge sites, a huge lagoon has been excavated on the eastern bank which has completely obliterated the site of Caledonian road.

While the tactical bridges solved the immediate problem of getting vehicles across the waterway, it was no long-term solution as they effectively blocked the river to the ubiquitous Rhine barge. High-level, semi-permanent bridges were therefore constructed incorporating at least one navigable span. The semi-permanent bridge at Rees was situated just 100 yards upstream from the site of London Bridge. It was a Bailey piled jetty type which could accommodate Class 40 loads on one carriageway and Class 70 on the other and was specially designed to be able to be constructed without floating cranes. Work began on April 3 and it was completed by May 21, 1945. Although the twin-carriageway bridge (called Tyne and Tees) served Rees well until 1950, a permanent road crossing of the Rhine at this point was considered essential although one had not existed there pre-war. Work began in 1965 on a suspension bridge virtually on the site of the original Lambeth bridge but on November 24, 1966 work came to a full stop when a complete section collapsed. It was finally opened on December 20, 1967.

Other semi-permanent bridges in the 21st Army Group area were constructed across the Neder Rijn at Arnhem (road) in Holland; at Spijk (rail) on the Dutch-German border, and at Xanten (with a Class 40 road bridge named Dempsey) between Rees and Wesel.

Wesel, so far as bridging was concerned,

Above: **The semi-permanent road bridge at Wesel built by the 1146th Combat Engineer Group beside the demolished road bridge photographed by Pfc N. Sperry of the Signal Corps.** *Below:* **The bridge was later replaced by the all-weather Montgomery Bridge. Today, the old approach road is still visible beside the rebuilt permanent bridge.**

fell within the zone of operation for the American Engineers. The river was crossed at this point by separate road and rail bridges but both had, of course, been demolished by the Germans when they retreated across the Rhine. As soon as German opposition had been eliminated in Wesel, work began on the construction of a Class 70 ferry, three Class 40 bridges (one a treadway, the second a reinforced, heavy ponton bridge and the third, a floating Bailey).

American engineers also had the task of constructing a semi-permanent bridge across the Rhine to replace the blown road bridge. This was to be a Class 40 two-way or Class 70 one-way timber pile bridge and test piles were driven on March 29 by the 1146th Engineer Combat Battalion Group to determine soil conditions and penetration. Thereafter a total of 926 piles were driven in the banks and across the Rhine to a depth of 27-44ft, each having a bearing value of 25 tons. The work continued twenty-four hours a day and, although the wet gap of the Rhine at this point is 1,036ft, a bridge of 1,813ft was necessary. A large part of Fort Blücher on the east bank was demolished to provide rubble for the approach road; likewise rubble from Wesel itself was used for the western approach and the connecting section between the Rhine and the nearby tributary, the Lippe, which also had to be spanned. After eighteen working days the bridge was finished and, suitably christened Roosevelt Bridge, was opened to traffic on April 18.

Just to the west of the demolished road bridge other engineers began work on March 29 on a railway bridge, 'The Lincoln-on-the-Hudson'. The first train crossed the 2,580ft bridge on April 9 — just eleven days later — and it was then estimated that it should last for ten to twenty years.

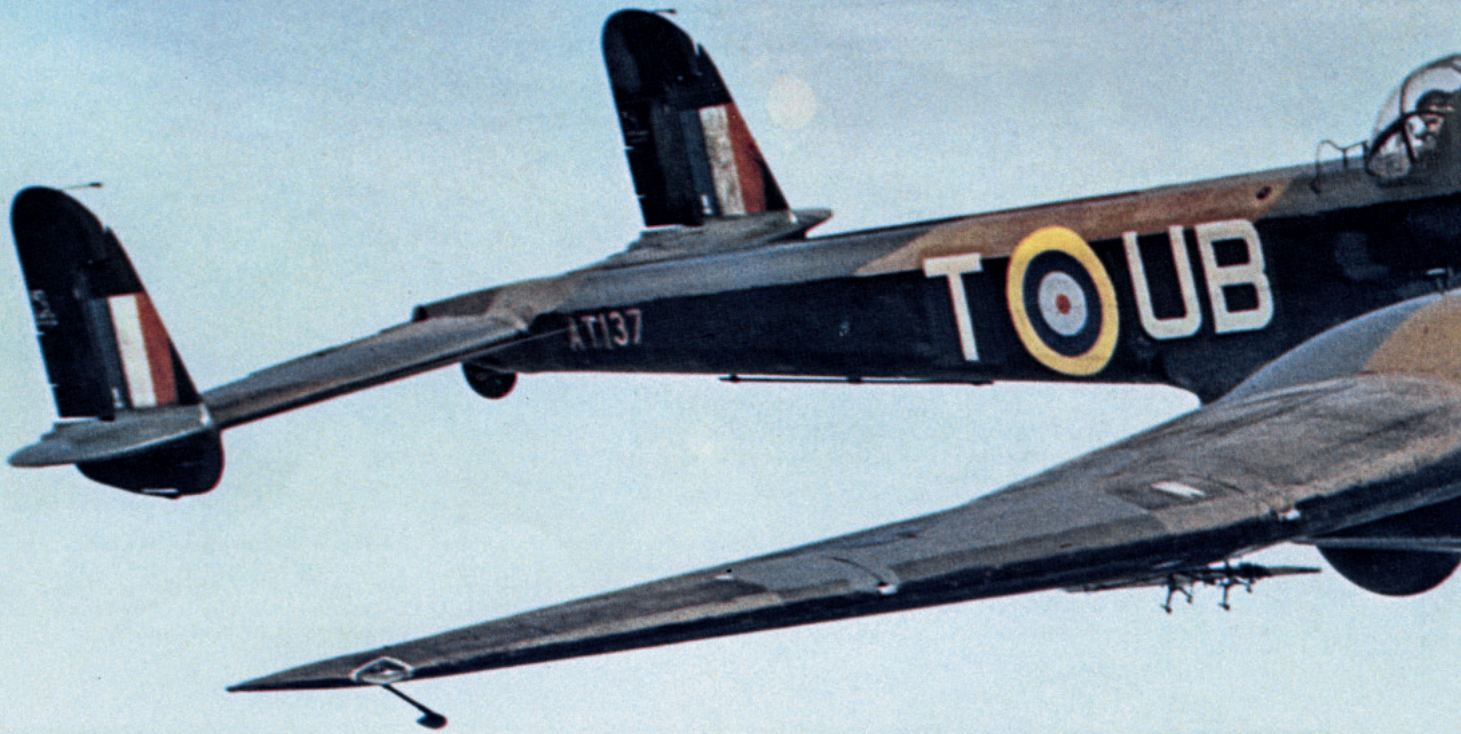
However, post-war plans for German rail transportation indicated that an east-west crossing of the Rhine at Wesel was no longer required and even the original blown railway bridge was never rebuilt. Today its pock-marked arches stand on either side of the Rhine devoid of steelwork and track.

The American Roosevelt road bridge was replaced by British engineers in 1946 by a new, all-weather, twin-carriageway Class 40 bridge. It was claimed at the time that it was the biggest (not the longest!) Bailey bridge in the world and was 2,052ft long resting on reinforced concrete piles and abutments. It was the only ice-free bridge in the British zone and, when opened on February 5, 1946, Lieutenant-General G. I. Thomas, GOC 1 Corps, named it Montgomery Bridge. It lasted for ten years until the original road bridge was rebuilt and reopened in 1956 after which it was dismantled by German engineers.

Above: **The Wesel rail bridge built by American Engineers, Seabees and Transportation personnel was situated just a few yards from the downstream side of the road bridge. By V-E Day, the eastbound freight over this one bridge had amounted to 273,141 tons. Other American rail bridges were the President Roosevelt Bridge at Mainz (see page 40) and the Victory Bridge at Duisberg.**

(In case our American readers are worried about Monty having a bridge named after him, Patton's name was also bestowed on a semi-permanent road bridge over the Rhine at Cologne which was opened on June 12, 1946!)

Above: **A Volkswagen was the first vehicle under the Memorial Arch of Montgomery Bridge (IWM).** *Below:* **The old, east bank approach road and, in the distance, the arches of the Wesel rail bridge.**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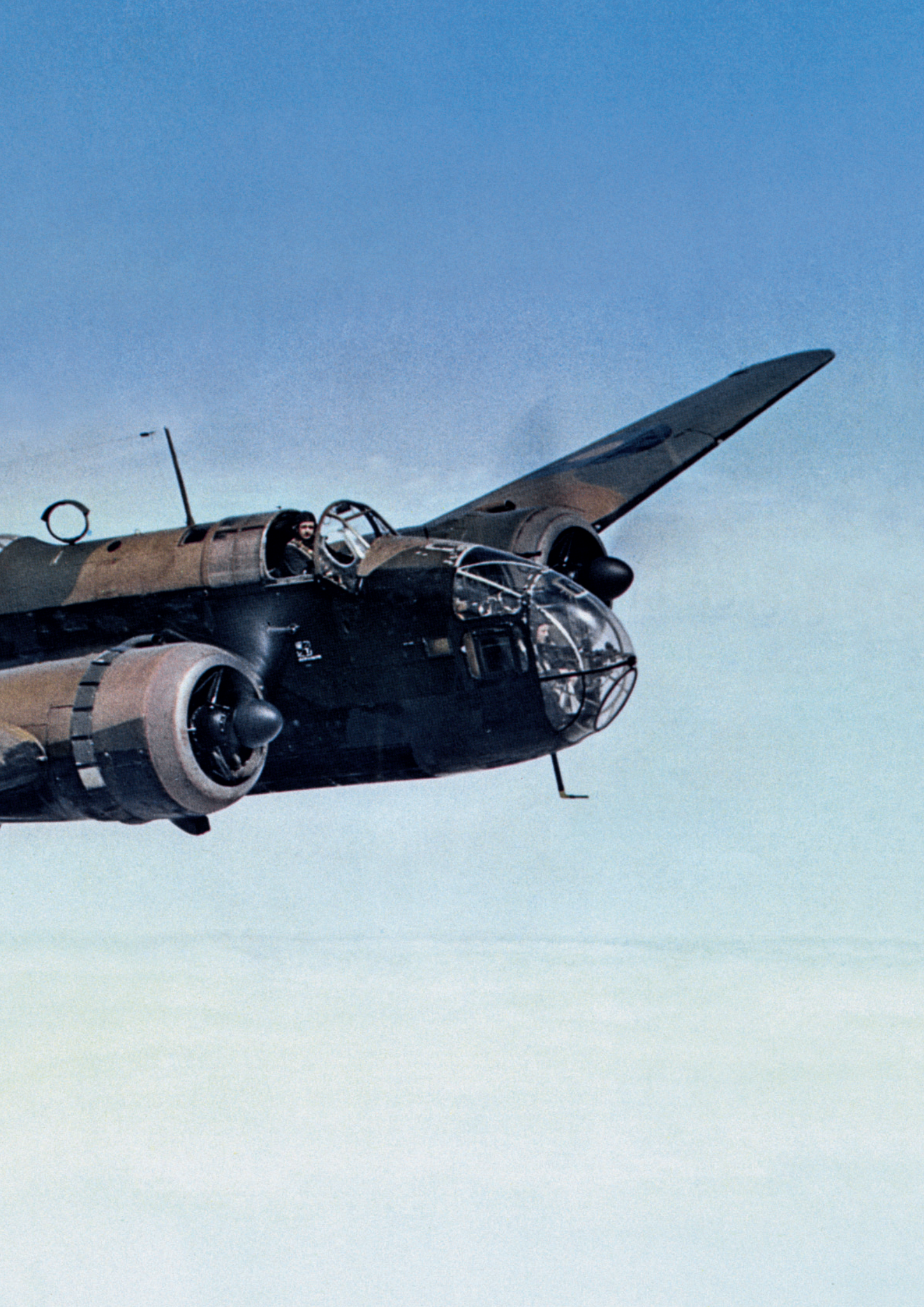
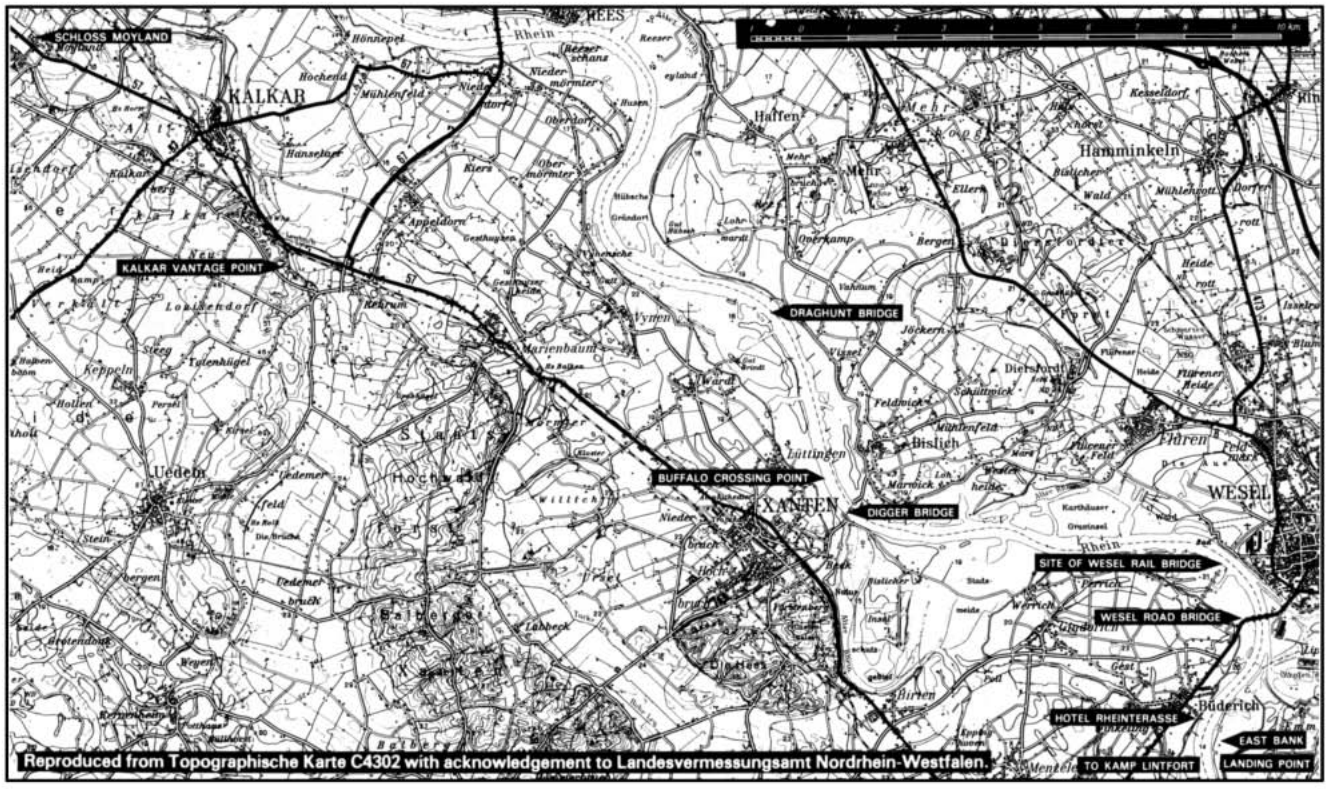




Winston Churchill visits the Rhine

General Eisenhower and Field-Marshal Montgomery had successfully prevented British Prime Minister, Winston Churchill, from participating in the early stages of the Normandy landings in June 1944. They naturally felt it was unwise to allow so important a person to be in the danger area but, perhaps, because of this earlier rebuff, Churchill was determined to be up front during the Rhine crossing. Field-Marshal Sir Alan Brooke, Chief of the Imperial General Staff, impressed upon Montgomery the Prime Minister's intention not to miss out this time. Montgomery replied: 'As regards the P.M. if he is determined to come out for the Battle of the Rhine, I think there is only one course of action and that is to ask him to stay with me in my camp. I shall then be able to keep an eye on him and see that he goes only where he will bother no one. I have written him a letter; Simpson will show it to you; it should please the old boy!'

The best account of the ensuing visit is given by Field-Marshal Brooke who accompanied Winston Churchill together with the PM's private secretary, Flying Officer John 'Jock' Colville and his Flag Officer, Commander C. R. 'Tommy' Thompson. Perhaps to emphasise that this was a combined operation, Churchill himself was dressed as a Colonel of the 4th Hussars.

The party left for Northolt aerodrome, situated on the western outskirts of London, on Friday, March 23.

'After lunch I drove with Winston to Northolt,' recorded Field-Marshal Brooke in his diary, 'The road was up on the way and the driver was going to take the diversion, but this did not suit Winston and we had to go straight through. This meant lifting some of the barriers, driving on the footpath, etc., and on the whole probably took longer than going round. However, Winston was delighted that he was exercising his authority and informed me that the King would not take such action; he was far more law-abiding!'

The Dakota taking the party took off at 3.00 p.m. and, after a two-hour flight across Belgium, landed close by Montgomery's HQ at Venlo. 'We found Monty there,' continued Alan Brooke 'very proud to be able to pitch his camp in Germany at last. We had tea, after which Monty described plan of attack for the crossing of the Rhine which starts to-night on a two Army front, with Ninth American Army on right and Second British Army on left. Crossings take place throughout the night, and the guns have already started and can be heard indistinctly in the distance.'

Winston Churchill later wrote that, 'the episode which the Commander-in-Chief particularly wished me to see was the drop next morning of the two airborne divisions, comprising 14,000 men, with artillery and much other offensive equipment, behind the enemy lines. Accordingly we all went to bed before ten o'clock.'

The Prime Minister arrives at Field-Marshal Montgomery's HQ at Venlo on Friday, March 23, 1945 accompanied by Field-Marshal Alan Brooke. The naval officer in the background is Commander Thompson, the PM's Flag officer (IWM).

Left: **Commander 'Tommy' Thompson points out the relevant features to be seen from the high ground south of Kalcar (IWM).** *Above:* **Reconstructing the scene — thirty years later. About 50 yards of the hill has since been cut away for gravel extraction.**

Still at Venlo, Field-Marshal Brooke takes up the story for the programme undertaken on Saturday.

'At breakfast Monty told me that from all reports he had received the forcing of the Rhine was going well. At 8.45 the P.M. and I started off together with Monty's A.D.C. *(John Colville meanwhile departed on a trip of his own with one of Monty's liaison officers Captain Gill).* We had a three-quarters of an hour's drive to a viewpoint about 2,000 yards south of Xanten from which an excellent view can be obtained when the weather is clear. Unfortunately it was rather hazy, but we could just make out the line of the Rhine from Xanten to Wesel and could just see some of the boats ferrying across the Rhine where landings had taken place.

'We were in the middle of the battery positions supporting that portion of the front, and there was a continual roar of guns as they were busy engaging German AA guns in anticipation of the arrival of the Airborne divisions. The 6th British and 17th American Divisions were due to start, arriving at 10 a.m., to land in the area about two to three miles beyond the Rhine, the far side of the Diersfordter Wald. The 6th Airborne Division was starting from East Anglia and the 17th Airborne Division from the Paris area. They arrived punctually to time, and it was a wonderful sight. The whole sky was filled with large flights of transport aircraft. They flew straight over us and over the Rhine. Unfortunately they disappeared into the haze before dropping their loads of parachutists. The flak could be seen bursting amongst them before they disappeared. Shortly afterwards they began to stream back with doors open and parachute strings hanging under them.

'After about an hour's continuous stream the gliders began to arrive and sailed past, flight after flight.

'We remained at this viewpoint for about two hours and then embarked in two armoured cars, one each. We went down into Xanten where we turned north and through Marienbaum at the north-east corner of the Hochwald and on to a bit of high ground just south of Kalcar. There we had a good view looking out on to the crossing-place of the 51st Division, whose divisional commander was unfortunately killed this morning. We lunched there and then dropped down to 3rd Division H.Q. in an old castle *(Schloss Moyland captured by the 3rd Canadian Division on February 23 after the fiercest fighting in the Battle of the Rhineland).*

'Winston then became a little troublesome and wanted to go messing about on the Rhine crossings and we had some difficulty in keeping him back. However, in the end he behaved well and we came back in our armoured cars to where we had left our own car, and from there on back to the H.Q.'

Above: **Winston Churchill roars through Xanten in his armoured car, photographed by Sergeant Morris (IWM).** *Below:* **We found the picture had been taken on the Klever-strasse just past the Hagenbuschstrasse.**

Left: **Goggles still round his neck, the PM arrives at 3rd Division HQ, Schloss Moyland, to be greeted by Major-General Whistler (IWM).** *Above:* **Baron von Steingracht never repaired the castle and even the balustrade has now fallen into the moat.**

Meanwhile 'Jock' Colville had crossed the Rhine with Captain Gill and walked to the village of Marwick. There, they found the 'Gasthof Sonnentag' beside the bund road full of German prisoners and British wounded. The PM's secretary (now Sir John Colville) explains what happened next:

'I stood talking to Gill in front of the inn. Suddenly a shell exploded in the river, and others began to fall nearer. Gill, quite unmoved, suggested it would be fun to talk to the prisoners and find out their impressions. We walked towards the front door of the inn to ask the officer in charge if he had any objection. Just as we reached the door, an 88mm shell landed precisely where we had been standing. We were less than ten yards from the burst and the Airborne Colonel's driver, who was next to me, had an artery severed. My tunic was drenched in blood. The next shell brought a tree down across the courtyard and as we made our way to the cellar, carrying the wounded driver, a third missile landed by the front door. A medical orderly took charge of the unhappy driver and as soon as the shelling stopped, we picked our way over the German prisoners, lying flat on the floor, and crawled out from among the debris.

'We met two tank officers, who gave us some eggs they had collected from a nearby farm and told us that the enemy were less than a mile away. We had crossed the Rhine in the belief that we were at least ten miles behind the lines. It seemed wise to retreat and so we recrossed the Rhine in an amphibious machine called a Buffalo which proceeded to charge the opposite bank at the wrong angle, toppled back into the river and flung us all, including the man with the severed artery, into a writhing heap on the floor.

'Finally, we succeeded in jumping ashore, recovering our jeep and driving back through devastated Xanten to 21st Army Group Headquarters. As we reached the entrance we all but collided with the Prime Minister and the Field-Marshal, the former, as I later discovered, glum and rather angry because he had not been allowed to cross the Rhine.

'They looked at my blood-stained tunic. What, they asked, had happened to me? I poured out what was, I thought, my exciting story. Monty was livid with rage. How dare I, a Civil Servant, get in the way of the battle! My job was back at Headquarters. I had deserted my post and, without permission, made free of the zone of operations under his command.

'His eyes blazing with anger, he said: "This is an intolerable act of insubordination and I shall . . . "

'Churchill, who had been listening to the tirade, interrupted him: "Before you say what you will do, Field-Marshal, pray remember Mr. Colville is my Secretary, not yours. It is for me and not for you to issue a reprimand".

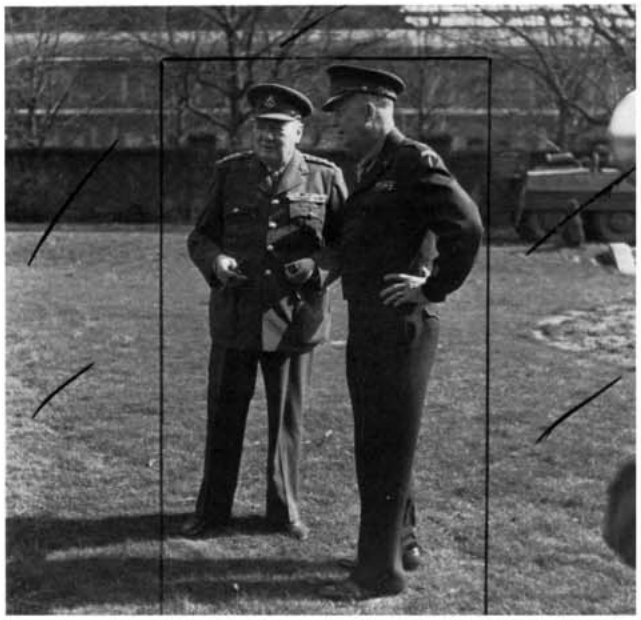
'Much later, when he was going to bed, he said with a kind smile: "I am jealous. You succeeded where I failed. Tomorrow nothing shall stop me. Sleep soundly; you might have slept more soundly still".'

Then, in Churchill's words, 'at 8 p.m. we repaired to the map wagon, and I now had an excellent opportunity of seeing Montgomery's methods of conducting a battle on this gigantic scale. For nearly two hours a succession of young officers, of about the rank of major, presented themselves. Each had come back from a different sector of the front. They were the direct personal representatives of the Commander-in-Chief, and could go anywhere and see anything and ask any questions they liked of any commander, whether at the divisional headquarters or with the forward troops. As in turn they made their reports and were searchingly questioned by their chief the whole story of the day's battle was unfolded. This gave Monty a complete account of what had happened by highly competent men whom he knew well and whose eyes he trusted. It afforded an invaluable cross-check to the reports from all the various headquarters and from the commanders, all of which had already been sifted and weighed by General de Guingand, his Chief-of-Staff, and were known to Montgomery. By this process he was able to form a more vivid, direct, and sometimes more accurate picture. The officers ran great risks, and of the seven or eight to whom I listened on this and succeeding nights two were killed in the next few weeks. I thought the system admirable, and indeed the only way in which a modern Commander-in-Chief could see as well as read what was going on in every part of the front. This process having finished, Montgomery gave a series of directions to de Guingand, which were turned into immediate action by the Staff machine. And so to bed.'

The Gasthof Sonnentag thirty years later. The eastern end of Digger Bridge, over which Churchill crossed on March 26, was sited just below.

'Jock' Colville, now Sir John, (second from left) pictured after the church service on March 25 (IWM).

Left: **The PM's party arrives at Major-General John Anderson's HQ at Kamp Lintfort. Field-Marshal Montgomery talks to Generals Simpson and Anderson while Field-Marshal Brooke jokes with General Bradley (IWM).** *Above:* **Standing in for General Bradley.**



Left and above: **Meanwhile, the PM talks to General Eisenhower on the front lawn opposite the coal mine on Frederich-Heinrich Allee, the picture which has taken us the longest time to locate.**

The next day was Sunday, March 25 — Palm Sunday — and the day began, as Field-Marshal Brooke describes, with a service.

'Winston came along too. The hymns were good, and the parson, a Presbyterian, preached a good sermon. After church we motored off to Rheinberg, where Anderson, commanding the 16th American Corps, had his H.Q. (*This is incorrect as the HQ was at Kamp Lintfort about 6 km from Rheinberg*). We were met there by Eisenhower, Bradley and Simpson.

'Anderson then explained his situation and the rapid progress they had made since they had crossed the Rhine. We then had a light lunch in the garden of the house which had been the colliery manager's. After lunch we went down the Wesel road to Büderich where a house (*now a hotel called appropriately 'Rheinterrasse-Wacht am Rhein'*) stands on the bank of the Rhine with a wonderful view across, up to Wesel on one side and down to the bridge of boats (*US treadway bridge*) farther south which the Americans have established.'

Whilst at the house, General Eisenhower had to leave urgently to confer with General Bradley. With the Supreme Commander absent, Churchill realised this was his opportunity to fulfil his own ambition to cross the Rhine. Afterwards Churchill wrote that as he turned to leave, 'I saw a small launch come close by to moor. So I said to Montgomery,

Winston Churchill, followed by General Simpson and General Anderson, help themselves to an alfresco lunch outside the front of the colliery-manager's house. Note the heavy censorship of these original photographs by Sergeant Morris (IWM).

Left: **Sunday, March 25, 1945. Winston Churchill and party on the balcony of the house overlooking the Rhine (IWM).** *Above:* **Tuesday, March 25, 1975 on the site of the balcony at Hotel Rheinterrasse.**

"Why don't we go across and have a look at the other side?" Somewhat to my surprise he answered, "Why not?" After he had made some inquiries we started across the river with three or four American commanders and half a dozen armed men. We landed in brilliant sunshine and perfect peace on the German shore, and walked about for half an hour or so unmolested.

'As we came back Montgomery said to the captain of the launch, "Can't we go down the river towards Wesel, where there is something going on?" The captain replied that there was a chain across the river half a mile away to prevent floating mines interfering with our operations, and several of these might be held up by it. Montgomery pressed him hard, but was at length satisfied that the risk was too great. As we landed he said to me. "Let's go down to the railway bridge at Wesel, where we can see what is going on on the spot." So we got into his car, and, accompanied by the Americans, who were delighted at the prospect, we went to the big iron-girder railway bridge, which was broken in the middle but whose twisted ironwork offered good perches. *(Much as the editor hates correcting Winston Churchill, they actually visited the Büderich road bridge.)* The Germans were replying to our fire, and their shells fell in salvos of four about a mile away. Presently they came nearer. Then one salvo came overhead and plunged in the water on our side of the bridge. The shells seemed to explode on impact with the bottom, and raised great fountains of spray about a hundred yards away. Several other shells fell among the motor-cars which were concealed not far behind us, and it was decided we ought to depart. I clambered down and joined my adventurous host for our two hours' drive back to his headquarters. It seemed to me he had one standard for Jock Colville and another for himself.'

Field-Marshal Brooke's diary records that General Simpson, Ninth Army commander, (on whose front they were) said to Churchill: ' "Prime Minister, there are snipers in front of you; they are shelling both sides of the bridge and now they have started shelling the road behind you. I cannot accept the responsibility for your being here and must ask you to come away." The look on Winston's face was just like that of a small boy being called away from his sandcastles on the beach by his nurse! He put both his arms round one of the twisted girders of the bridge and looked over his shoulder at Simpson with pouting mouth and angry eyes. Thank heaven he came away quietly. It was a sad wrench for him; he was enjoying himself immensely.'

When General Eisenhower heard of Churchill's success in setting foot on the eastern bank he said that, 'had I been present, he would never have been permitted to cross the Rhine that day.'

Centre: **Sergeant Morris records an historic moment as the PM steps ashore on the east bank of the Rhine (IWM).** *Right:* **Our historic recreation of the event, exactly thirty years later to the minute, one miserable day in March 1975.**

Left: **The Prime Minister returns to the west bank just below the Hotel Rheinterrasse (IWM).** *Above:* **It was absolutely teeming with rain when we took our comparison photograph.**

Centre: **Winston Churchill enjoying himself on the Wesel road bridge followed anxiously by Commander Thompson and General Simpson.** *Left and above:* **Observing Wesel — then and now.**

The next day, Monday, March 26, was the day of Churchill's departure from Montgomery's HQ. Before he left he added Chapter IX in the Field-Marshal's autograph book, each preceding chapter (comprising one page) having been entered by Churchill at various significant stages of the war.

Once the Prime Minister had left Montgomery's charge, there was still time for one last visit to the river as Field-Marshal Brooke describes:

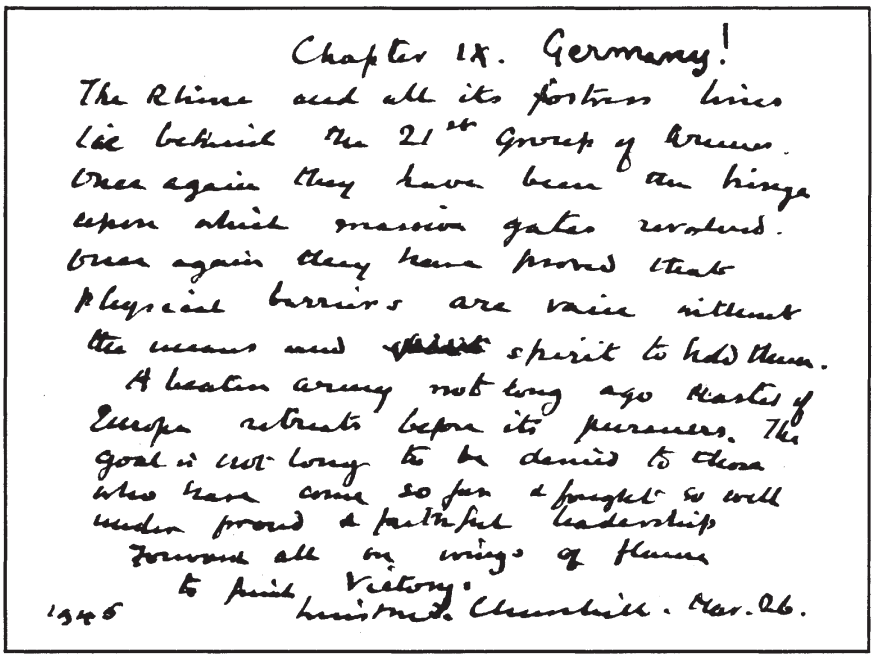
'After packing up kit, left camp at 10.15 a.m. for Neil Ritchie's (12 Corps) HQ. On the way we picked up 'Bimbo' Dempsey. On meeting Neil we changed into jeeps and I got in with him. We drove straight down to Xanten and on to the river on the Bislich road. Here we found the new Class 40 bridge (*Digger*) which had just been completed and we drove over it and up into Bislich; there we turned north and drove along the bank of the Rhine to one of the tank landing-vehicles (known as 'Buffaloes') crossing places. On the way we passed a gang of newly captured prisoners, a weedy-looking lot. We then got into the 'Buffaloes' which had been used in the assault crossing and re-crossed the Rhine.

'After recrossing the Rhine we motored farther north to the site of the next bridge, a Class 9, (*Draghunt*) which was also busy pouring vehicles over on to the far bank. We then had lunch on the bank of the Rhine just where our front line had been up to now.

'After lunch we parted with Ritchie and drove back to Monty's HQ., then to the aerodrome at Venlo, and by 3 p.m. were airborne and sailing off homewards. At 7 p.m. landed at Northolt. Winston, I think, enjoyed his trip thoroughly and received a wonderful reception wherever he went.

'It was a relief to get Winston home safely; I knew that he longed to get into all the most exposed positions possible. I honestly believe that he would really have liked to be killed on the front at this moment of success. He had often told me that the way to die is to pass out fighting when your blood is up and you feel nothing.'

Writing about Churchill and the visit to Lady Brookeborough two days later, Field-Marshal Brooke commented that, 'He was determined to take every risk he could possibly take and, if possible, endanger his life to the maximum! I rather feel that he considers that a sudden and soldierly death at the front would be a suitable ending to his famous life and would free him from the never-ending worries which loom ahead with our Russian friends and others. Setting aside my natural reluctance to share such a fate, I foresaw endless squabbles in endeavouring to save his life for a few months at least. On the whole, he was fairly amenable and overjoyed when on the Wesel bridge we had some shells falling round and could hear sniping going on within a short distance.'


Chapter IX. Germany!
The Rhine and all its fortress lines lie behind the 21st Group of Armies. Once again they have been an hinge upon which massive gates revolved. Once again they have proved that physical barriers are vain without the means and [illegible] spirit to hold them.
A beaten army not long ago masters of Europe retreats before its pursuers. The goal is not long to be denied to those who have come so far & fought so well under proud & faithful leadership
Forward all on wings of flame
to final Victory.
1945 Winston S. Churchill. Mar. 26.

Chapter IX, written by Winston Churchill, reproduced by permission of the estate of Field-Marshal Montgomery.

The editor's enthusiasm for historical reconstructions is, by now no doubt, evident to our readers. The visit by his namesake to view the Rhine crossing deserved special treatment and we therefore decided to re-enact the important features of Winston Churchill's visit in March 1945 exactly thirty years later.

We were, however, at a severe disadvantage when we reached Rees on the night of March 22, 1975. There would be no Bailey Bridges to cross and no handy landing craft or Buffaloes to take us across the river at the exact spots. We would have to compromise, therefore, by crossing the river via the two new bridges (at Wesel and Rees) and concentrate on the fixed landmarks.

We matched the armoured car pictures in Xanten and then motored north to the high ground south of Kalcar. This was not too difficult to locate although part of the hillside has been cut away to extract gravel and we made an educated guess that the castle was Schloss Moyland, which proved to be correct.

However we had no idea of the location of the 16th American Corps HQ which Field-Marshal Brooke gives (erroneously we discovered) as being at Rheinberg and described as a 'colliery manager's house'.

It would take far too long to elaborate on the fruitless search we made for old location of the HQ. After driving around for nearly eight hours, we finally discovered the manager's house, now an office for the colliery, six kilometres away in Kamp Lintfort. As our comparison photographs show, it has changed considerably since 1945 with the surrounding wall now demolished.

The house on the river bank did not take so long to find as we knew it could not be far upstream from Wesel on the western bank. After studying our maps we drove straight to Büderich and there it was (now called Rheinterrasse Hotel) although, to our horror, Herr Ernst Hüttner explained that the balcony where the VIPs had stood was demolished when the hotel restaurant was extended. Nevertheless, on the morning of March 25, 1975, exactly thirty years after the event, we matched the photograph.

As it was not possible to cross the Rhine at this point we had to return to Wesel, cross the new road bridge and work our way down the opposite side. A large new oil dock has been gouged out of the bank nearly opposite Büderich, and, when we saw this, we were afraid that this may have obliterated the site where Churchill stepped ashore. However we were lucky. When we reached the river's edge and lined up the spire of Büderich church, we pinpointed the exact spot. The time was 2.30 p.m. — within minutes of the time Churchill must have crossed. The place was deserted; probably nobody knew or cared that here, exactly three decades before, an historical event took place. We felt that at least three

Left: **The PM gives the Victory sign as he approaches Digger Class 40 Bailey at Xanten (IWM).** *Above:* **The old bridge approach in March 1975.**

Left: **Sergeant Midgley took this photograph of the PM with Lieutenant-General Ritchie, 12th Corps Commander, beside Draghunt Class 9 bridge (IWM).** *Right:* **Now just an ordinary stretch of river bank.**

people had remembered. It was a moving moment.

Returning to the Rheinterrasse Hotel, we matched the picture of the party returning; although the steps in the river bank remain the handrail has been broken off close to the ground. We then drove back to Wesel. Churchill himself wrote that he inspected the railway bridge although Brooke correctly describes it as the road bridge. The style of the girders in the photographs is unmistakable.

We then had to motor north to the sites of the 'Digger' Class 40 bridge at Xanten and the Class 9 'Draghunt' near Wardt. Naturally, no trace remains of either bridge although the sites of both can easily be located. Then, beside Draghunt, we took our last symbolic comparison of a memorable tour.

Above: **The Prime Minister and his Field-Marshals picnic on the west bank of the Rhine, just beside Draghunt bridge (IWM).** *Right:* **The end of our own tour . . . the house on the far bank was rebuilt in 1970 as a tavern 'Zum Sturmen Deich'.**

Fourth crossing– the Third do it again!

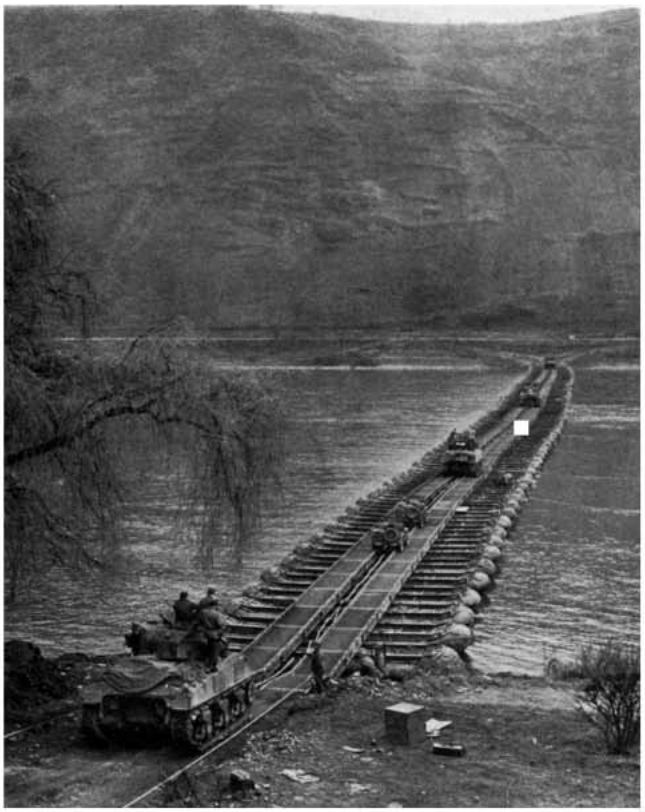
Following the main Rhine crossing in the north, four more crossings of the Rhine (comprising ten separate assaults) took place before March was out. The first of these was already being planned by the resourceful Patton to follow up his moral 'first' over Montgomery, even while the latter's attack was just beginning. As far as the Germans were concerned, it would confirm all the more Bradley's boast that 'American troops could cross the Rhine at will'.

The location for the crossing was the most unlikely of all, being south of Koblenz across the famous Rhine Gorge. Here steep cliffs lined the banks and the river was fast flowing. There was also little space on the banks to manoeuvre, being barely enough room for a road and railway track on each side. Patton, with the advantage of hindsight, claimed that the choice of such an unlikely location aided the crossing.

Two regiments of the 87th Division were to begin the assault at one minute past midnight on March 25. However six minutes before the 347th Infantry assault craft left the west bank at Rhens, 'all hell broke loose' from the German side. The fire was intense and it was an hour before the boats finally pushed off. Other boats crossing downstream were illuminated by German flares as they touched the east bank. All attempts at an organised crossing failed and efforts to lay a smoke screen at daybreak were not successful as the damp air in the gorge prevented the smoke from rising. When, by early afternoon, the 347th's reserve battalion had still been unable to cross, the assistant divisional commander, Brigadier-General John L. McKee ordered further attempts at the site abandoned.

Ten kilometres upstream, around the horseshoe bend of the Rhine at Boppard, the other regiment, the 345th, fared better. The leading companies were across the river within twelve minutes. The build up proceeded steadily although ashore the Germans were

Above: **Loaded with troops of the 353rd Infantry Regiment of the 89th 'Rolling W' Division, a Third Army DUKW hits the water on the morning of March 26 at Oberwesel (US Army).** *Below:* **We found this US jerrycan on the same spot in March 1977.**



Left: **Patton's Shermans roll across a ponton bridge on March 27 at Boppard, crossing site of the 345th Infantry Regiment (US Army).** *Above:* **The old approach road, now Gymnasialstrasse.**

reacting vigorously with plunging fire from the cliffs. By mid-afternoon, reinforcements for the 347th were crossing at Boppard and advancing downstream to help those troops who had crossed earlier at Rhens. By evening, both regiments had managed to secure the high ground on the east bank and, additionally, the town of Oberlahnstein was in American hands and work had begun on the construction of a ponton bridge.

Early the following morning March 26, the Third Army's 89th Division made a double-pronged assault a further fifteen kilometres up river using the 345th Infantry Regiment at St. Goar and the 353rd five kilometres to the south at Oberwesel. The crossing was timed for 2.00 a.m. but once again the Germans were ready. German flares and a burning barge lit up the gorge at St. Goar but the two leading companies managed to set foot on the east bank and soon began clearing the town of St. Goarshausen.

At Oberwesel, DUKWs were used to good effect to ferry eighteen infantrymen at a time across the river. Fighting continued at both crossing sites throughout the day and, late afternoon, following a strike by P-51 Mustangs, the east bank cliffs near the Lorelei rock were secured, eliminating direct German fire on St. Goar. A few minutes later the Stars and Stripes were raised on top of the Lorelei.

For much of the length of the Rhine gorge between Oberwesel and Boppard, there is only enough room on each bank for a railway track and two-lane road. Consequently, to cater for the many tourists who want to stop to admire the view, a wide hard shoulder, with a retaining stone wall, has been built on the river side of the road with work still proceeding just south of St. Goarshausen. It is therefore not possible to drive onto the small, stony beach from which the DUKWs set out but a search uncovered a rusted jerrycan.

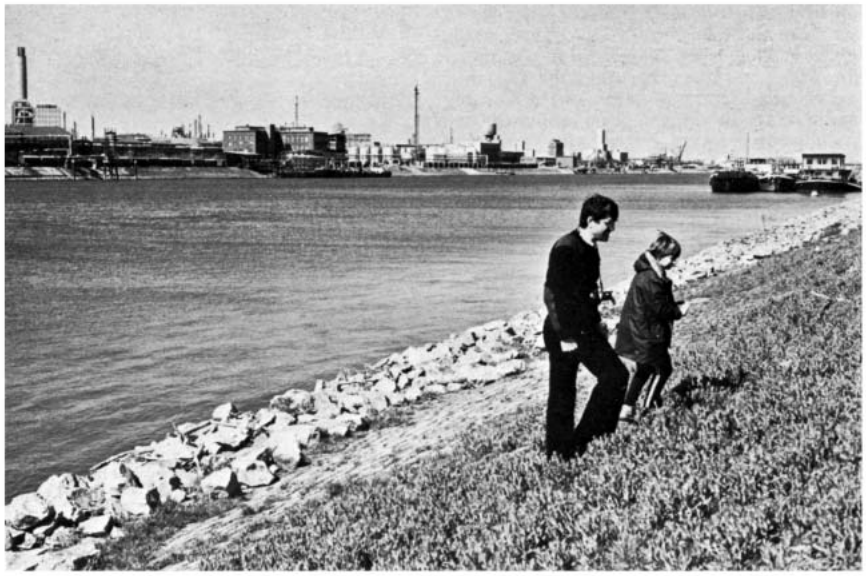
Today, one can make one's own assault crossing at St. Goar on the exact spot where the 89th Division set out for DM4 on the Rhine ferry which crosses crab-like to St. Goarshausen. A road leads from the town to the Lorelei rock, 127 metres above the Rhine. Legend says that the Nibelungen treasure lies hidden at the base and that from the Lorelei itself a maiden was believed to lure men to their deaths on the fast-flowing river. Here the GIs ceremoniously raised their flag after the battle, the legend holding true to many of them as they crossed.

Top: **March 26 at St. Goar. The 340th Infantry Regiment cross the Rhine as a GI in the foreground watches for snipers. Photo taken by T/5 T. G. Halkias of the Signal Corps.**
Above: **The peaceful scene with St. Goarshausen, in the background, in March 1977.**

Left: **Third Army troops raise the American flag on top of the Lorelei rock overlooking the Rhine gorge (US Army).**
Above: **Our own flag-raising ceremony thirty-two years later in March 1977.**

The Seventh Army at Worms

Above: **GIs of the 7th Infantry Regiment touch down on Friesenheimer Insel. In the background, the I. G. Farben Werk.** *Below:* **The factory, greatly altered, is now owned by BASF.**



Following the successful crossing of the Rhine by the Third Army at Oppenheim on March 22, Lieutenant-General Alexander M. Patch began to push ahead on getting the Seventh Army across the Rhine. However, unlike the first 'running jump' crossing of Patton's Third, General Patch was organising a deliberate two-division assault north and south of Worms. By the time assault boats and bridging equipment had been brought forward, the Third Army was rapidly expanding its bridgehead just to the north.

The Seventh Army attack was to begin at 2.30 a.m. on March 26, but, before this time arrived, the Germans opposite the 3rd Division, south of Worms near Frankenthal, had been aroused. They opened up with mortars and anti-aircraft guns to which the American artillery replied. After a thirty-eight minute American barrage of more than 10,000 rounds, the first assault waves moved off. They reached the east bank but flanking fire from Friesenheimer Island (formed by straightening the river at this point) hampered follow-up operations. It was not until midday that a battalion of the 15th Infantry cleared the island with an amphibious assault from the rear.

Meanwhile the 45th Division were hoping for a surprise crossing north of Worms at Hamm. Here, the American artillery held their fire in the hope that the preparations for the crossing had not been detected on the German bank. In spite of their precautions, the Germans had been alerted and were ready. As the boats neared the east bank, the Germans came to life. One regiment, although reaching the bank, lost half its assault boats in the second and third waves. Fierce fighting raged for an hour but slowly the Americans, backed up by fourteen M4 Sherman DDs, gained ground.

By nightfall both bridgeheads were secure and engineers were constructing the necessary ponton bridges for the build-up. With the artillery, which had supported the four assault regiments, across and the Frankfurt-Mannheim autobahn reached at one point, the 12th Armoured Division was ready to exploit the success.

Friesenheimer Insel is now a huge industrial complex and would be, no doubt, completely unrecognisable to the GIs of thirty years ago. As in the whole of Germany today, prosperity is evident everywhere with new factories, roads and buildings. Each year one visits the country more changes are evident all making it more difficult to pinpoint locations exactly. Although the old road still runs along the western edge of the island the huge BASF works on the opposite (western) bank of the river has been completely rebuilt from the days of I. G. Farben, the huge industrial combine which existed in the Third Reich which was split up and renamed by the Allied Powers after the war.

As a contrast Hamm, north of Worms, remains a typical Rhineland village. The old road still leads down to the river bank where the American treadway bridge once stretched out across the river. Today, the scene must look very much the same as when the 45th Division crossed with only the constant throb of the heavily-laden Rhine barges to remind the visitor that this is 1977.

Top and above: **The 63rd Division crosses the 1,164ft bridge built by the 1014th and 1019th Engineer Treadway Companies at Hamm. Photographer 2nd Lieutenant J. Harris, US Signal Corps.**

Above and below: **The Alexander Patch bridge, named after the Seventh Army commander, beside the blown Nibelungenbrücke at Worms. The rebuilt bridge was opened on May 1, 1953.**

Patton's hat-trick

By nightfall on March 26, General Bradley's 12th Army Group had secured four solid bridgeheads across the Rhine — the First Army's at Remagen, the Third Army's at Oppenheim and the Rhine gorge and the Seventh Army's at Worms. Although General Patton still had one corps on the west of the Rhine and could easily have passed these troops through one of his other two bridgeheads, he chose to do it the hard way with another assault crossing. Even the official American historian can only conjecture as to why Patton chose to make another assault crossing at this stage.

The General himself was probably preoccupied with the ill-fated Hammelburg Mission in which Task Force Baum drove thirty-five miles behind German lines to rescue American POWs including Patton's son-in-law. (Patton later denied he had known his relative was at Hammelburg.) It was left to his Chief-of-Staff, Major-General Hobart R. Gay, to work out the plan for the assault. This was to be a pincer movement by the 80th Division to clear the junction of the River Main with the Rhine.

At 1.00 a.m. on March 28, the 317th Infantry Regiment embarked from the slipways and docks of the Mainz waterfront whilst the 319th Infantry crossed over through the previously won Oppenheim bridgehead to attack the Germans across the River Main from the rear.

The operation ran smoothly and the 317th suffered only five men wounded, the 319th a little worse with three men killed, three missing and sixteen wounded. Perhaps luckily for the reputation of the Third Army Commander this third, rather unnecessary, crossing was accomplished lightly. Engineers immediately began the construction of a 2,223ft railway bridge to speed up supplies to Third Army. Work continued non-stop, day and night, under the glare of spotlights. On April 14 it was finished and when Patton arrived for the inauguration he was offered a pair of oversize scissors to cut the ceremonial ribbon. True to form, he refused these with the remark, 'What are you taking me for, a tailor? God-dammit! Give me a bayonet!'

Above: **Third Army engineers of the 80th Division claimed that the 'Sunday Punch' ponton treadway at Mainz, was the longest assault bridge across the Rhine at 1,865ft (US Signal Corps).** *Below:* **The restored Cristuskirche is a prominent landmark today.**

Bayonet in hand, George Patton prepares to open the President Roosevelt railway bridge beside the demolished Mainz-Gustavsburg bridge (US Army).

Our own tame Patton wields a bayonet on the same spot. The building in the background is the Mainzer Ruder Verein tennis club.

De Gaulle comes in last

Above: **Although the French Army made the last and smallest assault crossings of the Rhine, the one at Speyer is the only one to be recorded today by a permanent memorial.**

To the south of the Seventh Army sector lay that occupied by the First French Army under General Jean de Lattre de Tassigny. When the Seventh made their move to cross the Rhine on March 26, the French General went to Lieutenant-General Jacob L. Deevers, commander of the 6th Army Group, to secure a piece of the action for the French.

General de Lattre's northern boundary with the Seventh Army had already been extended three times since the middle of March and, at the meeting on March 27, General Deevers agreed to give the First French Army another twenty kilometres of Rhine frontage including the town of Speyer. This move now gave the French army suitable sites for their own assault crossings. Fearing that American units driving south from the Worms bridgehead might 'capture' his crossing objectives, the French General, in spite of his lack of assault boats, issued instructions to his 2nd Corps Commander, Major-General A. J. de Monsabert, to cross the river on March 31.

Meanwhile in France, General de Gaulle was no doubt fretting at the glory being earned by the American, British and Canadian units already across the Rhine and driving into Germany. Just after midday on March 29, he sent a telegram to his First Army Commander: 'My dear General, you must cross the Rhine even if the Americans are not agreeable and even if you have to cross it in boats. It is a matter of the greatest national interest. Karlsruhe and Stuttgart await you, even if they do not want you!'

At the same time, news arrived that the US Seventh Army, driving south on the opposite bank, was approaching the French zone. Immediately, General de Lattre issued instructions to General de Monsabert to cross the following night regardless of the shortage of boats.

The initial crossing was to take place at Speyer although the boats had still not arrived by the evening of March 30. Then, at 2.30 a.m. on March 31, a single rubber dinghy reached the waiting 3rd Régiment de Tirailleurs Algeriens and Sergeant Bertout and ten men with paddles climbed aboard. Thus, using this one boat, the French assault crossing of the Rhine commenced!

During the night, several journeys were made to shuttle troops across, the round journey taking about an hour. Four more dinghies arrived at 5.30 a.m. enabling a whole company to be transported to the far bank. At daybreak the Germans realised what was happening and began shelling the crossing site. However the shuttle service continued and seven motor boats arriving at 9.30 a.m. helped the build-up. By 10.30 a.m. the whole of the 1st Battalion were across.

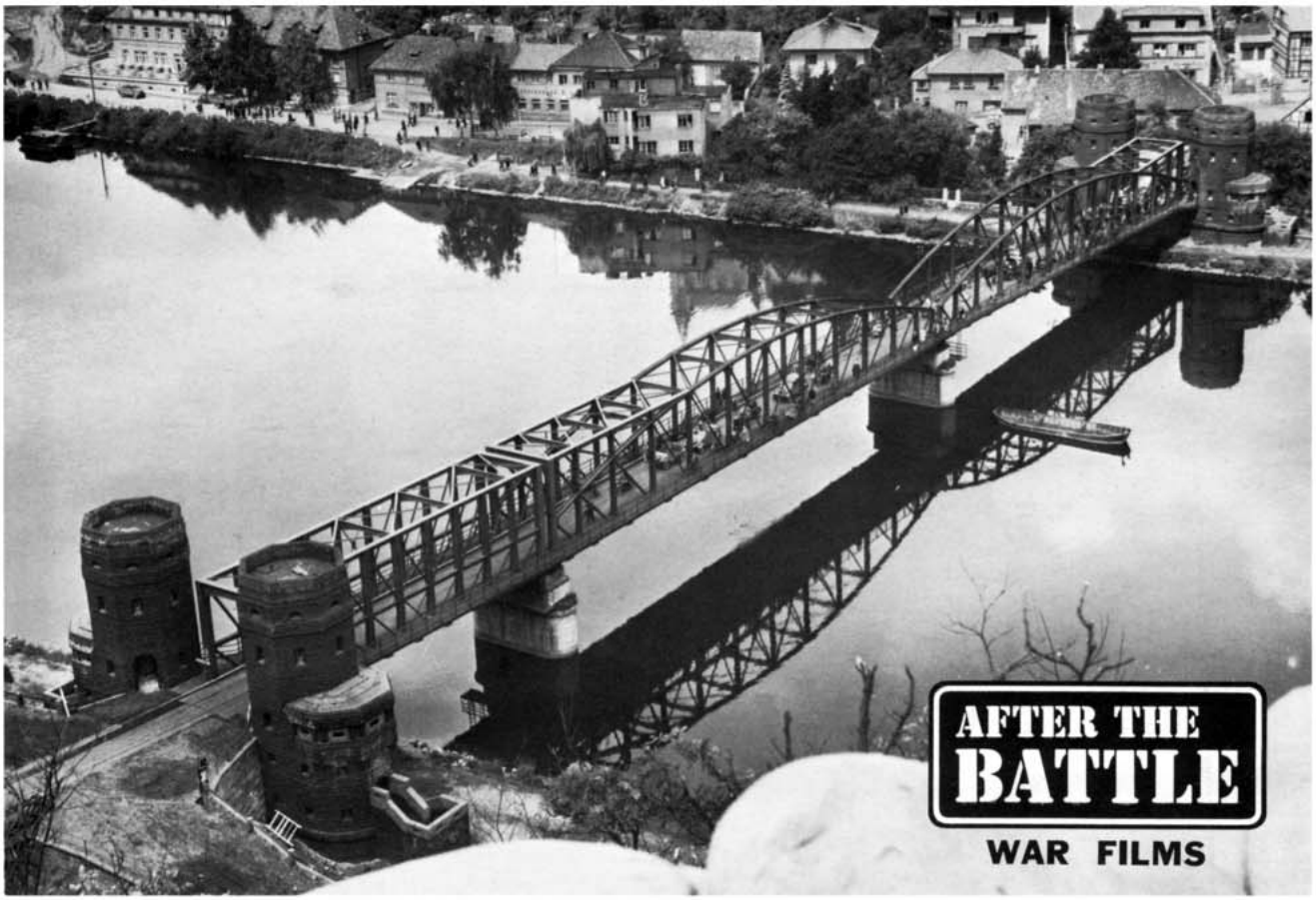
Further south, the 151st Régiment d'Infanterie and the 4th Régiment de Tirailleurs Marocains shared two motor boats and fifteen stormboats on their twin-assault at Germersheim. The attack was a disaster. By the time the boats left the western bank it was daylight and the Germans were fully awake. Some boats were hit, others broke down and only three, containing thirty men, reached their objective. A second wave of fifteen boats was launched, many of these also not reaching the far side. Nevertheless, the small bridgehead, only fifty by one hundred and fifty metres, was held and slowly reinforced and expanded throughout the day.

On April 1, the neighbouring American Corps Commander, Major-General Edward A. Brooks, agreed to let twenty French vehicles cross the Rhine using an American ponton bridge at Mannheim. By the end of the day, the whole of the 3rd Régiment de Spahis Algeriens de Reconnaissance and the 7th Chasseurs had managed to cross via the bridge and, driving southwards, soon made contact with the bridgehead.

General de Lattre made two further assault crossings of the Rhine, the first at Leimersheim on April 2 and the second, on April 15, seventy kilometres further south at Strasbourg. It was the last assault crossing of the Rhine during the Second World War.

Throughout our whole series of trips to cover the various crossings of the Rhine, that of the 3rd Régiment de Tirailleurs Algeriens at Speyer, the smallest operation, is the only one we found commemorated by a memorial on the actual site of the assault. Just south of the town, a stone stands on the spot where Sergeant Bertout set out across the river. It is, perhaps, understandable that memorials to the Allied victories are not popular in Germany today and several British memorials in the north of Germany were removed to England when part of the British zone became the responsibility of the German Bundeswehr some years ago. However the various extensions of the French zone by General Deevers in March 1945 are still reflected in a French military presence in Speyer today and, as a rather appropriate conclusion to our story, we photographed a French Army 'Willys' jeep standing outside the French HQ on Maximilianstrasse.

Re-living the past. A French Army Jeep Militaire M 201 outside the Garrison HQ in Speyer.

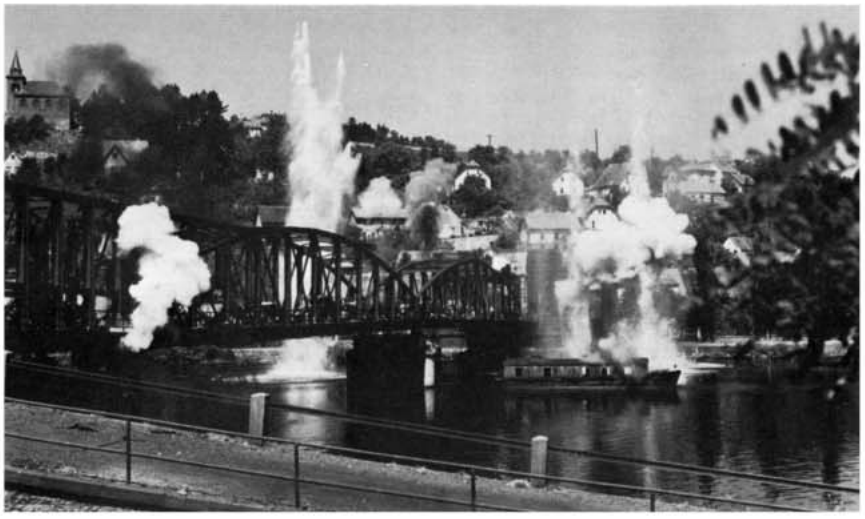


THE BRIDGE AT REMAGEN

Of the ten war films made in 1968, 'The Bridge at Remagen' must, undoubtedly, be the most outstanding. The story of the capture of the Ludendorff railway bridge is exciting enough on its own and needs no additional embellishment to convert it to the screen. With the benefit of Ken Hechler's excellent book published in 1957 with the author himself (then as now a Congressman for West Virginia) as one of the technical advisors, the scriptwriters had all the accurate, background information they needed. It seemed a pity, therefore, as this is the story of a factual event, in which all the characters can readily be identified, that the names had to be changed. Perhaps this was 'to protect the innocent' as Jack 'Dragnet' Webb used to say!

Lieutenant Karl Timmermann becomes 'Phil Hartman', played by George Segal; Sergeant Joe DeLisio is portrayed by Ben Gazzara as 'Sergeant Angelo' and Bradford Dillman plays 'Major Barnes', really Colonel Leonard Engeman. The US 9th Armoured Division commander, Major-General John W. Leonard (called 'Brigadier-General Shinner' in the film) is well played by E. G. Marshall although the part he acts out is more akin to that of the real General Hoge, the 9th Armoured CCB Commander. For example, it was General Hoge that stood on the hillside overlooking the bridge whilst the attack to capture the bridge went in — General Leonard spent most of March 7 with the southern column of his division crossing the Ahr river, only driving to Birresdorf mid-afternoon.

On the German side, Major Hans Scheller is called 'Major Paul Kruger' and is played by Robert 'UNCLE' Vaughn and Peter Van Eyck plays 'General von Brock', really General Otto Hitzfeld. Hauptmann Willi Bratge becomes 'Captain Carl Schmidt', played by Hans Christian Blech and Hauptmann Karl Friesenhahn is portrayed by Joachim Hansen as 'Captain Otto Baumann'.



The bridge over the Vltava river at Davle in Czechoslovakia, which doubled as the Ludendorff railway bridge, pictured during the simulated American bombing attack.

When the producer, David L. Wolper, renowned for his documentary style films, decided to put the Remagen story onto celluloid, the most important star, the bridge itself, was the most difficult to locate. As the original bridge no longer existed, Wolper sent photographs and descriptions of the bridge to several countries to try to locate a similar structure. After eighteen months, the search ended in Czechoslovakia where the Czech Ministry of Transport offered the use of a road bridge over the Vltava river at Davle, 15 miles south of Prague. It was not an exact replica, but the art director, Alfred Sweeney, redesigned it by adding scaffolding, raising the track level and blasting a tunnel entrance into the nearby hillside. A false church was also built on a hill to double as St. Apollinaris church and the Czech Filmexport Ministry

Above: **Preparations are made for the street-fighting scene during the American advance to the bridge and,** *below,* **the shot as it appeared in the finished film. The buildings and architecture closely resemble the real market-place in Remagen, see page 4.**

agreed to halt all bridge and river traffic in the immediate vicinity for five months.

Another compelling reason for filming 'The Bridge at Remagen' in Czechoslovakia was when David Wolper was given permission by the Czech Government to blow up part of the town of Most, 75 miles north-west of Prague. The town, originally part of the German Sudetenland having the right architecture to double as Remagen, had been slowly razed to the ground by the Czechs to unearth vast coal deposits discovered beneath it. The local authorities were only too pleased to let Wolper speed things up and special effects expert, Logan Frazee, with Czech demolition experts, planted 4,000 sticks of industrial TNT and 600lbs of dynamite in buildings covering three streets. The charges were then systematically detonated in the re-creation of the assault on Remagen on the afternoon of March 7, 1945. These sequences, perhaps more than any other, make the film so realistic with real buildings collapsing in clouds of brick dust instead of Hollywood mock-ups exploding skywards.

Czechoslovakia also proved to be an ideal source for original German equipment and many enthusiasts must have been delighted to see, for the first time in recent war films, original German Hanomags instead of the usual, straight-sided, White half-tracks. Eight WWII M-24 Chaffee tanks had been loaned to Wolper from the Austrian Ministry of Defence together with three half-tracks, three armoured cars, eight 2½-ton lorries, and six jeeps.

The Barrandov Film Studios at Prague provided over 200 technicians and nearly 5,000 extras, many of them Czech Army personnel, who were dressed as GIs and armed with an assortment of 2,000 Springfield, MI Rifles and sub-machine guns also supplied by the Austrians.

Filming began on June 6, 1968, with seven days on location at Most which lies only eight miles from the East German border. During the battle scenes, filmed on June 8-9, when three square blocks of the town were blown up, it was reported, ominously, that Russian troops had begun manoeuvres just across the frontier. Perhaps wisely, the Czechs decided that the old Communist headquarters in Most should be dismantled by themselves!

By June 22, the crew had already moved to the Davle bridge when Russian MIGs and helicopters appeared and buzzed a scene involving the M-24 tanks. It was during the filming at the Vltava bridge that Logan Frazee and stuntmen Hal Needham and Gary McClarty worked out a spectacular scene. The script called for two men and a donkey to fall twenty-five feet into the river as a section of

(Fra30)PRAGUE,Aug.21(AP)-IRRITANTS-One of sparks leading to today's Soviet invasion of Czechoslovakia was this recent appearance of U.S. tanks on Prague street. East Germans claimed tanks were sent by American CIA to aid liberalized Dubcek regime. Actually, M24 tanks of World War II were being used by U.S. company filming "The Bridge at Remageh" on Czech location,with Czech soldiers lining street appearing as U.S. GIs in war movie.(APWIRE-PHOTO)(rw/ho)1968

The original caption claims that the film was one of the reasons given for the Russian invasion of Czechoslovakia.

the bridge was hit by artillery fire. Needham recalls how it was done: 'We had a series of explosions on the bridge and two and a half tons of TNT in the water. The British director, John Guillermin, wanted a big geyser of water coming up as we went down, but we were only in the air about a second and a half at that height, and if you're in the water when that thing goes off, you're in a lot of trouble. I told Logan, "You've got to hit that right." He said, "Don't worry." If you look at the film carefully, when we're just six feet off the bridge, that water is boiling up, and as we fall we meet the water half way'. On other occasions, the two stunt men drop from the top of the bridge, fall off motor-cycles at 30mph and have their jeep set on fire, overturned at 25mph and rolled down a 40ft embankment.

On July 29, the Russian newspaper Pravda reported the discovery of a US arms cache in Czechoslovakia and the East German news agency, ADN, claimed that the weapons found matched WWII rifles, pistols and machine guns in the film companies' arsenal. Four days later, the ADN news story pressured the Czech police into an investigation of the 'Remagen' arsenal and, as a result, the Czech army temporarily confiscated the special effects explosives, placing the whole of the armament under tight security.

On August 5, the East German agency then reported that the 'Remagen' set-up was a CIA cover-up operation. Proof of American 'intervention' and 'counter-revolutionary activity' on behalf of the liberal Dubcek regime could be found, they said, in the presence of eight American tanks and other armoured vehicles plus hundreds of operative weapons that had been brought into Czechoslovakia by 'American spies disguised as actors, technicians and tourists'. The tanks and arsenal, they claimed, 'constituted a grave and serious threat to the security of the entire Communist bloc'.

The same day David Wolper sent a letter protesting harassment and intimidation to Alois Plednak, the Director-General of the Czech film industry and also a member of the Central Committee of the Czechoslovak Communist Party. In his reply, Plednak apologised for the 'unpleasantness' and stated that he had 'no influence with the press of the foreign country you mention'. He assured Wolper of the Czechs' utmost goodwill and that he would deny any false charges if necessary.

On Tuesday, August 20, the 60th day of shooting, the company had just filmed a scene in which George Segal and Ben Gazzara lead the armoured infantry attack on the bridge and had returned to its base at the International Hotel in Prague. The Executive Production Manager, Milton Feldman, takes up the story:

'From 1.00 a.m. in the morning until 4.30 a.m., the telephone in my hotel room kept ringing. Always it was the same thing: the operator said there was a call from Italy or the United States, but the call never came through. I didn't know that David Wolper in Italy and United Artists officials in the US had heard news of the Russian invasion of Czechoslovakia and were trying to reach me. But telephone service was disrupted.

'Finally at 5.00 a.m. I received a call from John Guillermin, who had learned about the invasion from the mother of one of our interpreters. I looked out of my hotel window and confirmed the news; Russian tanks were already in the streets.

'The first thing to do was try to reach the American Embassy and find out what our situation was. The hotel operators were swamped, so I went down to the switchboard and took a place beside them. I finally got connected with the Embassy at 6.00 a.m. We were advised to stay in the hotel and wait to see what would happen.

'Next I managed to get David Wolper on the teletype at the Parco dei Principi Hotel in Rome. He also advised us to stay put. Meanwhile I told everyone in the company to stay in the hotel, pack luggage and be ready to meet in the lobby at a certain hour.

'We stayed in the hotel throughout the day and that night. I had learned through the Embassy people, who were extremely helpful in keeping us informed, that the airport was closed. So I told all our car drivers to stand by — and not to move the cars and lose gasoline. It was reassuring to learn that the Embassy would supply us with any additional gasoline we might need.

'At 10.00 a.m. the next morning, I contacted Wolper once more on the teletype. Our conversation went like this:

Wolper: Okay, bring everyone out.

Feldman: I can stay behind and keep an eye on things.

Wolper: No, don't be a hero, Bring everyone out — then we'll decide what to do about the picture.

'By 2.00 p.m. 21 cars and one truck had reported to the International Hotel. That was to be our convoy for 89 people, including my wife and two daughters. I took the truck to the Embassy and loaded between 30 and 40 jerry-cans full of gasoline, plus a 50-gallon tank on the truck. I also got a letter from the Ambassador asking that we be given every courtesy on our travels.

'The cars and the truck were loaded at the hotel and, at 2.45 p.m., the exodus began. Our convoy had now grown to 40 cars, as we were joined by other Americans, as well as some British and Germans who were anxious to leave Czechoslovakia.

'As the stream of cars was leaving central Prague, we came to a street that was partially blocked by a Russian tank. The first car, in which I was riding, passed by, but then I looked back. My heart fell as I saw the Russians stop our truck. I jumped out of the

car and started running back with the Ambassador's credentials. But before I could reach the truck, the Russians had let it through.

'And so our curious caravan motored across the fields of Czechoslovakia toward the Austrian border. The trip was marked by only two incidents. Four helicopters swooped down to take a look at us; apparently we seemed innocent, because they flew away. Then at Tabor we came face-to-face with a column of Russian tanks but they swerved into a field, and we continued on our way.

'Finally we reached the Austrian border and crossed over into Gmund without incident. It was 2.30 a.m. and not a soul to greet us. Wolper was waiting for us with buses at another border town, Freistadt, many miles away. I had originally told him we would come out at Freistadt, but Gmund was more convenient; my message of the change of plans failed to reach him.

'We found whatever sleeping accommodations were available and Wolper arrived in the morning. He took most of the company to Vienna. I fell in bed and brought the others the following morning.'

The film production report for August 20 carried one laconic line: 'No shooting today because of shooting'. Though hit by what surely was the biggest production snag ever to be suffered by a film unit, David Wolper and the United Artists European chief, Ilya Lopert, quickly agreed that the film, already 65 per cent complete, must be finished.

By telephoning around Europe, Wolper found a suitable studio available in Germany at Hamburg. Here, Alfred Sweeney began the construction — or rather reconstruction — of a 100ft railway tunnel to duplicate the one abandoned at Prague's Barrandov Studios. Without the original drawings or plans which had all been left in Czechoslovakia, he worked strictly from memory in the recreation of the set which was completed within ten days. Sweeney admits he cut corners but defies anyone to spot the differences in the film. He also had to redesign and construct two additional interior sets at Hamburg; one being the inside of the German farmhouse attacked by Able Company on the way to the Rhine. It is during this attack (with the realistic firing of a hand-held Panzerfaust) that the Company Commander 'Captain Colt' played by Paul Prokop gets killed. This gives Lieutenant Timmermann charge of the company although this change of company commander really took place earlier in Stadt Meckenheim when the real Captain Frederick Kriner was hit taking the town. The other interior constructed at Hamburg was the elaborate baronial headquarters of the German High Command.

During the unit's three to four weeks in Hamburg, various exterior locations in and around the famous port city were used: the undersection of the Alte Elbbrücke for one, and a small farm at Woltersdorf, 30 miles east of Hamburg near Mölln, for another. Both exteriors were striking substitutes for previous Czech locations.

Due to its hurried departure, the film company had left an immense quantity of costumes, props, arms and other equipment in Czechoslovakia together with five days' supply of exposed negative. Negotiations for its return went surprisingly smoothly and, on September 16, all the 5,200 items left behind arrived at the Hamburg studio.

However the major portion of filming that remained was on the bridge itself and Feldman advised Guillermin and Sweeney to look for a similar location in the Castel Gandolfo region in Italy near the Pope's summer residence in the Alban Hills, 20 miles south-east of Rome. There, on the first day of scouting, they found hills and a lake that closely resembled the Vltava River. Work began at once on the construction of a half-replica of the Czech bridge, with two stone towers and a fake railroad tunnel at one end. Although mainly a scaffolded superstructure over dry land, the Castel Gandolfo 'bridge' replaced the one at Davle for action scenes depicting the final American assault. 'It cost a small fortune,' said Wolper, 'but the terrain around Castel Gandolfo is an almost perfect match-up with the Davle landscape and in the completed picture, I defy anyone to tell the difference.'

Filming with George Segal (Lieutenant Timmermann), left, and Ben Gazzara (Sergeant DeLisio) continues at Castel Gandolfo in Italy. Director John Guillermin on the right.

The major factual error in the film occurs when Timmermann's men first reach the bridge. They are shown making a frantic effort to remove the charges hanging on the girders before the Germans can set them off. It certainly adds to the excitement but the removal of the unexploded charges really occurred after the big explosion had failed to destroy the bridge.

Meanwhile, under special arrangement with the Russian occupying troops and the Czech Government, Wolper was granted permission to return to film long-shots of the bridge in Davle, and second unit director, William Kronick, re-entered Czechoslovakia on October 7 for a week to shoot two important scenes: the abortive German attempt to destroy the bridge and the subsequent victorious crossing of the span by more than 600 American troops portrayed by regular Czech Army soldiers in GI uniforms. These shots were later tied to medium and close shots made in Hamburg and Italy. Ironically, the Russian military command in Prague oversaw Kronick's work and provided troops of their own to guard against the possibility of other Soviet soldiers mistaking the staged battle sequences for the real thing!

For retired US Army Colonel Cecil E. Roberts, the film's second military advisor, the making of 'The Bridge at Remagen' represented an assignment nearly as exciting as the actual taking of the bridge.

'Hell,' he said with a Texas drawl, 'it took us only two days to capture the Remagen bridge. Here it's taking us close to 100 days to re-create the event on film. Of course,' he admitted, 'we only had to fight the Germans back in '45 — we didn't have the Russians to contend with!'

To which Ken Hechler added, 'Yes, but can you think of a better sub-title for a war movie than: 'The Picture the Russians couldn't stop!'

The execution of Major Paul Kreuger for failing to blow the bridge. The real Major Scheller met his death in a wood near Rimbach, thirty miles east of the Rhine and now lies buried in Grave 22, Block I of the Altenkirchen cemetery in Birnbach near the German-Austrian border.

THE SWEDISH HAMPDEN

Swedish Air Force specialists examine the wreckage. The picture shows why Tsatsa is rarely visited, being entirely formed of loose, jagged rock.

In June 1942, the infamous PQ17 convoy sailed to Russia. Out of the thirty-seven ships that left Iceland, only fourteen reached Archangel — twenty-four had been sunk by German aircraft and U-boats. In order to avoid another tragedy with convoy PQ18, scheduled for sailing in September, the chief of RAF Coastal Command, Air Chief-Marshal Sir Philip Joubert, was allowed to proceed with his plan for protecting convoys with Russian-based aircraft.

Under the Command of Group Captain F. R. Hopps, this force was to consist of four photographic reconnaissance Spitfires, a squadron of Catalinas (No. 210) and two squadrons of Handley Page Hampden torpedo-bombers, Nos. 144 and 455 RAAF. The Catalinas were to operate from Grasnaya on the Kola Inlet while the Spitfires and Hampdens would be based at Vaenga.

The men and equipment for both squadrons sailed from Greenock, Scotland on August 13, 1942 in the American cruiser *Tuscaloosa* and three destroyers and all arrived safely in Russia. The task of flying the aircraft to their distant destinations across German-held territory was not so easy. By September 4, thirty-two Hampdens prepared to leave RAF Sumburgh in the Shetland Isles for north Russia. The aircraft consisted of sixteen Hampdens from No. 144 Squadron RAF and a similar number from No. 455 Squadron of the Royal Australian Air Force.

The greatest difficulty of the flight was presented by the limited range and navigational facilities of the Hampdens and

No. 144 Squadron, RAF, which returned from Russia on October 14, 1942 (IWM).

The helicopters, which transported the investigation party, on Tsatsa, photographed by Group Captain Barratt.

the result was a very heavy casualty roll merely getting the aircraft to their operational base. Of the Australian aircraft, one ran out of fuel and crashed in Russia a write-off although the crew were saved and a further two aircraft never arrived.

No. 144 Squadron fared worse losing six aircraft. One ran out of fuel and force landed in Russia with some damage, whilst another was shot down by Russian fighters while coming in over a prohibited area. It ditched off-shore and sank before the wounded air gunner could be released; meanwhile the rest of the crew were shot-up in the water by the Russians. They managed to struggle ashore where they were greeted by rifle fire until their shouts of 'Angliski' were recognised. Three other aircraft were reported missing and were never found whilst a fourth, Serial AE436, crashed in neutral Sweden.

This aircraft was reported to have hit the top of a snow-covered mountain at 5,600ft in the middle of the night, bursting into flames. Three crew members were killed outright but, the pilot, Pilot Officer David I. Evans and a passenger on the aircraft Bernard J. Sowerby (whose mission was to teach the Russians new radio technology), survived. Sowerby was sitting on a small stool with his back to Dave Evans and, on impact, although his legs folded under the stool, he remained seated. The aircraft split apart in front of him and he was able to step out of the crash unharmed.

Pilot Officer Evans was not so lucky, being trapped in the battered cockpit, suffering burns to his face and hands when the plane burst into flames. As Sowerby helped him out of the wreck, the ammunition began to explode and they were forced to take cover in the darkness.

At the time they thought they had landed in Norway but, after two days struggling through the snow following a river, they saw two men fishing from a boat in a lake. Waving and shouting, they caught the fishermen's attention and, with their help, the survivors reached a village called Kvikkjokk to find they were in Sweden. There they were taken to the general store where a Mrs. Eriksson took them in and nursed Evans' burns. By this time, Sowerby later reported, they had already agreed to concoct a story to give to the Swedish authorities about being pursued by German fighters and having crashed in Norway where they had been captured by the Germans but had subsequently managed to escape to Sweden. He said that they felt this explanation might be looked on more favourably (instead of admitting overflying neutral territory in wartime) and so add to their chances of repatriation.

It is believed that the real reason for the crash was that, with one engine failing, the pilot let down below the freezing level on being told by the navigator that they had cleared the mountains. The aircraft was 'Struck off charge' in RAF records on September 24 as just another missing aircraft whereupon, two weeks later, Evans and Sowerby arrived in the UK having been repatriated by the Swedish authorities.

On October 17, 1953, Her Majesty the Queen unveiled the Commonwealth War Graves Commission Memorial at Runneymede to the memory of all those aircrew missing on flights over northern and western Europe. On panel 99 was inscribed the name of Pilot Officer William Bowler, J7210; on panel 103 that of Flight Sergeant John Campbell, R69686, and on panel 104 the name of Flight Sergeant James Jewett, R56296, all of the Royal Canadian Air Force serving with 144 Squadron who were officially reported missing, having failed to return from a flight on September 4, 1942.

More than three decades passed. Pilot Officer Evans left the RAF in 1946, a Squadron Leader with a DFC, dropping into obscurity and Corporal Sowerby returned to civilian life.

Then, on August 15, 1976, two Swedish hikers, who were camping in the Lappland mountains, discovered the remains of a crashed aircraft on Tsatsa mountain, 35km north-west of Kvikkjokk. The crash was clearly of wartime vintage as the wreckage was littered with guns and ammunition and appeared to be British. The find was included in a Swedish TV news broadcast and, as a result, the British Defence and Air Attaché, Group Captain K. J. Barratt, was requested to examine the crash. He was flown by Swedish Air Force jet and an Army helicopter to the site. The Ministry of Defence have since released his report:

'The aircraft had struck a comparatively flat spur at 67° 12′ N, 17° 20′ E on a heading of approximately 090° and left a wreckage trail of approximately 300 yards. In this trail were parts of a bomb sight and tail drift sight, indicating early disintegration of the nose navigation compartment, the remains of one crew member, the aircraft main dinghy, parachute packs with the parachutes torn out by impact, engine cooling gill assemblies, the exhaust mufflers, various items of flying clothing and personal clothing, parts of the flying control run linkages and engine control linkages. The remains of the second body lay 50 yards from the fuselage still clothed in Sidcot flying overalls.

'The main area of the wreckage contained the fuselage which had jack-knifed at the rear of the crew compartment, the tail boom lying alongside and parallel to the fuselage with the tailplane actually just in front of the nose. An intense fire had broken out at the rear of the bomb bay position which I estimate to have been a pyrotechnic fire. It had melted much of the metal but had not severely damaged the main crew compartment nor the tail boom.

Above: **Pilot Officer Bowler's gas mask, still in fair condition after 34 years' exposure to the elements.** *Below.* **The front half of the fuselage (Crown Copyright).**

Above: **Bernard Sowerby, one of the two survivors, was traced and flown back to the crash site by the Swedish newspaper Aftonbladet on August 26, 1976.** *Below:* **After visiting the wreckage, he was taken with his wife, Joan, to meet Mrs. Ericksson, left, still living in Kvikkjokk (Aftonbladet).**

The fire area was approximately five yards in diameter. Within a radius of some 20 yards lay one Pegasus XVIII engine, the carburettor assembly, both the propellers, both the main wheels and undercarriage struts, one complete twin-gun installation of Vickers gas-operated machine guns on their mounting ring, two single V.G.O. guns, the aircraft radio transmitter and receiver and a large number of Vickers ammunition magazines some of which were bulged by explosion of the rounds inside. Documents found were an RAF Brevity Code Book in good condition, a soaked and compacted topographical chart (since treated by the Swedes to reveal a pencilled track line) and the burnt and illegible F.700. Two escape maps of silk were in excellent condition. Old style British steel helmets and gas masks were particularly poignent reminders of World War II.

'Both rear gunner positions had been destroyed although the forward part of the upper position contained personal effects of one of the crew which had all been blackened by fire. The crew position forward of the main spar and behind the pilot seemed to have no fire damage whilst the pilot's cockpit was comparatively undamaged apart from the caving of the side-walls. The iron framework which supported the nose perpex dome was still alongside the nose having been folded back on impact. The starboard wing although badly torn was still in position on the aircraft, the main spar being relatively intact and the port wing had broken free lying some 200 yards down the mountain slope, again relatively undamaged. One fuel tank lay on its own comparatively undamaged. The second engine must have fallen down the side of the mountain and may still be lying there or buried under snow.

'The pilot's cockpit contained the control column, rudder pedals, throttle box with both throttles fully forward, both ignition switches "on" as were the fuel cocks, the flap indicator showing flaps full down, the torpedo sight controls, pilot's morse key, and all instruments. The aircraft clock had come out of its mounting but appeared to be undamaged; it had stopped at 1055. The air speed indicator still read 125 knots, the altimeter 5,600ft, the Sperry gyro indicated a heading of 275 and the P4 compass was still intact. The pilot's personal weapon, a Smith and Wesson revolver, lay on a stone by the side of the cockpit and the pilot's Verey pistol was in position

and loaded. A .5in Browning machine gun, in very good condition, was cocked and loaded and has been removed from its fixed position, together with the full tank of belted ammunition, by the armament specialist. The crew compartment of the fuselage had come to rest on a heading of approximately south.

'The fuselage markings had long been obliterated by weathering but a fuselage panel bore on its inner surface the Serial Number AE436 and the Pegasus engine was stamped with the number P30386 126100P. The starboard main spar was stamped on the top EEP5639 and an engine cowling was stamped EEP9277. Many other stamped serial numbers were found on various components but it has since been established that the airframe number was AE436. MOD AR9 have since found that the fuselage letters were originally PL/J. These numbers show that the aircraft was in fact one of No. 144 Squadron Royal Air Force and was one of the aircraft which left Sumburgh on 5 September 1942. Two of the dead crew were identified by their still legible identity discs as an officer, William H. Bowler, and an NCO, John H. Campbell. The third body could not be identified but has been declared to be an NCO, James Jewitt.'

The discovery of the wreck aroused intense interest in Sweden as it was the first wartime crashed aircraft to be found since the end of the Second World War. (The locations of all other wrecked aircraft were known by the Swedes before the war ended.) The Swedish newspaper, Aftonbladet, quickly jumped on the story; traced Bernard Sowerby, now 64, and flew him to Sweden together with his wife, Joan. The pilot David Evans could not be traced.

They were flown to Tsatsa mountain by helicopter where Bernard Sowerby saw the crash for the first time, for in 1942 it had been pitch dark, deep in snow. All around were moving reminders — a steel helmet, possibly his own he thought — parachutes and jackets. He pointed out to his wife where he had been sitting at the time, climbing into the wreckage to sit on the stool once more. In the cockpit, the control column still moved freely and he indicated where Dave Evans had sat in the burning aircraft.

There are several reasons why the wreckage had remained undiscovered for so many years. Tsatsa is in a very remote area of northern Lappland and is 36 kilometres from the nearest road which ends at Kvikkjokk. Only the most enthusiastic hikers would venture up on to this particular mountain which, as the photographs show, is comprised entirely of broken, loose and jagged rocks. The snow does not clear from the top of these mountains every year and so for many years the wreckage would have been buried or disguised by it. Even when the snow does clear, the wreckage from the air resembles a small remaining patch and there is of course very little air traffic in that area. When the two survivors were questioned by the Swedish authorities it is unlikely that they would be able, in such featureless terrain, to be able to describe exactly where the aircraft lay and an expedition to search for it would have demanded much time and expense.

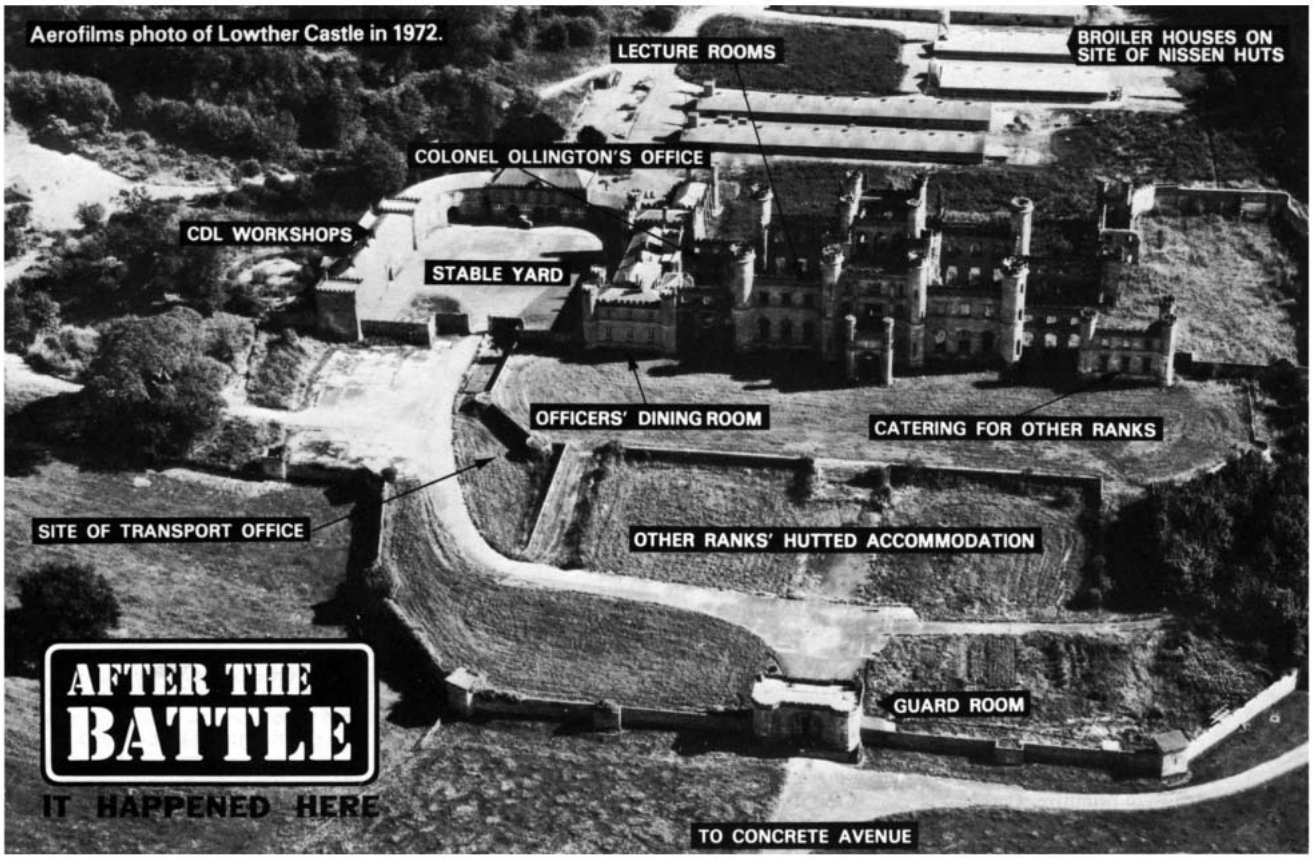
On September 24, 1976, the story came to a fitting end when the remains of the three crew members recovered from the crash site were laid to rest in the Commonwealth War Graves plot at Kviberg Cemetery, near Gothenburg — the largest cemetery in Sweden.

A full military funeral was provided by the Queen's Colour Squadron of the Royal Air Force who were flown to Sweden for one day specially for the occasion. Those attending the ceremony included a sister of Flight Sergeant Campbell who had come from Canada; a Swedish Air Force Officer, Major-General Bengt Rosenius with guard of honour and colour party; the British Ambassador Sir Sam Falle; Mr. G. Blackstock, Canadian Charge d'Affaires in Sweden; a representative of the Canadian Veterans Association in London; the Canadian Defence Advisor in London, Colonel Kanfuran; the British Defence Attaché, Group Captain Barratt, and the British Consul-General in Gothenberg.

It is now hoped that the wreckage of this sole known remaining Hampden will be shared between the Royal Air Force Museum and Swedish historical enthusiasts when it can eventually be recovered from the mountain.

Canadian flags cover the coffins during the ceremony in Kviberg Cemetery.

A last tribute from the RAF Commander of the Queen's Colour Squadron, left; an officer from No. 18 (Maritime) Group, RAF, centre, and the British Defence and Air Attaché in Stockholm, Group Captain Barratt, right.



THE CDL TANKS OF LOWTHER CASTLE

The secret 'invasion' of Lowther Castle had its improbable origins thousands of miles away in the hot sands of Egypt. The German advance had put the safety of the Suez canal in jeopardy. The problems of defending it against a night attack made the army examine methods of illuminating the canal, bearing in mind the obvious vulnerability of searchlights. As such a device was already under consideration, it was given the code letters CDL which stood for Canal Defence Light.

The idea of attack by illumination first occurred to the late Commander Oscar de Thoren, RN, in 1915. His project was to use powerful projectors on motor vehicles (later tanks) to enable them to move over an illuminated field at night time. The intention was to obscure everything advancing behind the illuminated front and so completely dazzle the enemy as to render aimed fire on his part impossible. After his idea was turned down by the War Office in 1917 and again in 1922, de Thoren was granted permission to submit it to the French Government. Meanwhile in England it was made public property in a thriller entitled 'Eye for an Eye'.

In 1933 a syndicate, known as the de Thoren Syndicate, was formed. Mr. Marcel Mitzakis (a British citizen of Greek parentage) was its manager, Major-General J. F. C. Fuller was its tactical adviser, and the late Duke of Westminster financed it. The first trial in France took place in 1934, and the second, with improved apparatus, at Chalons in 1936 which was attended by War Office representatives. It resulted in the War Office requesting the syndicate to stage a demonstration in England. This took place in February 1937 on Salisbury Plain and was so satisfactory that the War Office ordered three sets of the apparatus for further trials. Exasperating delays followed, and it was not until the night of June 7/8, 1940, that the final trial took place at Lulworth. Ten days later the War Office took over the project, and put in hand immediate construction of 300 projector turrets.

The principle of the device was based on the common knowledge that if a bright light falls on the eye, the pupil contracts to shut out the excess light. Conversely, if the light is suddenly extinguished the pupil dilates in an effort to increase the amount of light falling on it. The theory was that if a bright light was shone through a mechanically driven shutter, set to open and close at a certain frequency, the on-looker would become virtually blind as his eyes would be continually trying to adjust themselves to ever-changing conditions.

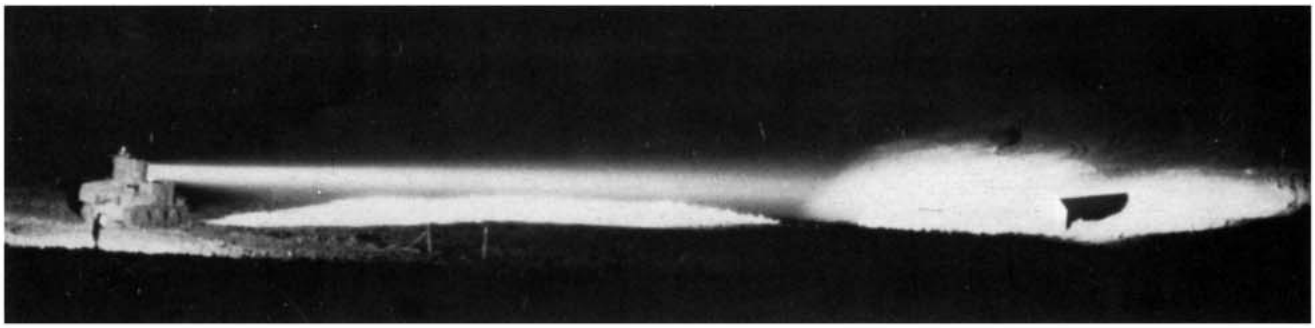
The CDL turret was divided into two compartments. The operator sat in the left hand one while the optical equipment occupied the right hand side. The 13,000,000 candlepower light came from a slimly-built carbon-arc mounted on a cradle in the centre of the light compartment, the power being supplied from a 9.5kw generator driven by a separate auxiliary engine in the case of the Matilda and Churchill tanks. The intense beam of light was picked up by a reflector which was a parabola in its vertical axis and an ellipse in its horizontal axis to produce a beam which converged and subsequently diverged from a nodal point some 60 to 70 inches from the source of light. This beam was reflected half way down its primary focus by an ordinary flat reflector of polished aluminium. The effect of the two reflectors was that the arc lamp could be mounted behind armour and the beam was emitted at the point where the beam converged, which was through a slot two inches in width and 24 inches in height in the front of the turret. Although this slit was vertical the light struck the target area horizontally, this was achieved by the use of the parabolic mirror. The addition of the alloy reflector prevented the mirror being shattered by machine gun or small-arms fire and, in fact, it was found that, even after repeated hits, the light intensity was hardly affected.

The angle of the beam dispersion was 19 degrees which meant that if the CDL tanks were placed 30 yards apart in line abreast, the first intersection of light fell about 90 yards ahead and at, 1,000 yards, the beam was 340 yards wide by 35 feet high. This formed triangles of darkness between and in front of the CDLs into which could be introduced normal fighting tanks, flame-throwing Churchill Crocodiles and infantry.

A further refinement was the ability to flicker the light. On the order given for 'Scatter', an armour-plated shutter was electrically oscillated back and forward at about six times a second. When first produced, it was thought that this flicker effect (similar to the modern disco strobe lights) would have a damaging effect on the eyes of any observer and might cause temporary blindness. Later, blue, and yellow, glass screens to cover the slot were available. Their use was intended to enhance the difficulty of estimating the range of a CDL tank from an enemy position, and particularly whether it was closing the range, or stationary.

The first hurdle to overcome was the question of a suitable site to carry out the development trials of this top secret device with facilities for training in its use. Lieutenant-Colonel N. W. Duncan (later Major-General) was dispatched to carry out an extensive reconnaissance. After looking at sites from Wales to the south of Scotland one place stood out as ideal—Lowther Castle.

The disadvantage of disturbing good farming land and its close proximity to Penrith had on the other hand, the advantage



of suitable terrain with ample space at the Castle for laboratories, offices and workshops. The added benefit of the ring fence would make it relatively easy to guard, as secrecy was the prime consideration. The castle and grounds were subsequently transformed by the addition of Nissen huts on the forecourt while thousands of tons of concrete were laid between the fine avenue of trees.

During its hey-day, the Lowther coat-of-arms would be reproduced every morning in the centre of the stable yard around an ornamental fountain, using coloured chalk powders on freshly laid sand, while over thirty stable hands attended to the polishing and grooming of horses and harness. The desecration of the 5th Earl's 'holy of holies' began on the day when a Matilda tank backed up to the fountain and ripped it out of the ground.

The conditions under which the first tank was converted were primitive. Corporal F. G. Howe (later Staff-Sergeant in charge of the CDL workshops) remembers the terrible conditions with five inches of snow on the ground. As there was no building large enough to take a tank completely, the first Matilda was converted by driving the front half into a coach-house, placing timbers over the open doors and draping them with tarpaulin sheets.

The most rigid precautions were taken to maintain security. Contracts were placed for the different components with different firms and all the equipment was sent for assembly to the CDL School. None of the stores passed through Ordnance channels and most of the CDL parts were made by Vulcans of Newton-le-Willows and machined at the Southern Railway workshops at Ashford.

The living conditions for the men were primitive for the first few months while Nissen huts were being built by the side of the river Lowther, near the railway viaduct. Marquees were erected, each holding three bell-tents, in an effort to give some protection from the elements. During one terrible night, a gale twice blew down all the tents. Recognising the terrible conditions the men had to put up with, the CO of the School, Colonel R. S. Ollington, gave the men five days hardship leave that first Christmas.

Having developed a working model, the next step was to demonstrate its capabilities. In complete secrecy, a CDL Matilda was transported to the Lulworth range in Dorset where Sergeant Fred Howe had volunteered to drive the tank at some risk to his life. During the day, the range had been 'swept' (all tank-tracks removed), taking on the form of a harrowed field. As darkness approached, a 25-pdr field gun was pulled out under the charge of Sergeant-Major Pat Ward, the NCO in charge of the Lulworth gunnery range. He was informed that a vehicle would drive on to his range later that night and that he must stop it using his 25-pounder with live shells.

At a given radio signal, Sergeant Howe moved off from his hidden position 2,000 yards away, watched by the top brass and a nervous Colonel Ollington. With shells being fired at him at the rate of one a minute, Sergeant Howe calmly manoeuvred his tank over the range, stopping, reversing and crossing the range from side to side, all the time keeping the light dead ahead and changing the colour screens. When only 500 yards from the still-firing 25-pounder, Sergeant Howe gave the pre-arranged signal to cease fire. Sergeant Howe then pulled up in front of the officers and each one was given a sheet of paper and asked to draw a line representing the route taken by the tank. Almost without exception, most drew a straight line from Irish Mell Gap to their position. Then, to prove what had really happened, Sergeant Howe illuminated his track marks to the incredulous officers!

The first unit to be trained at Lowther was the 11th Royal Tank Regiment, commanded by Lieutenant-Colonel H. T. de B. Lipscombe, which arrived at Lowther in June 1941. During the first week some 50 Matilda and Churchill tanks arrived. The tank crews had absolutely no idea why the security measures were so tight at Lowther. A former CDL driver, Mr. J. Part, recalled the feeling of the men when they were ordered to start removing the armament from some of the tanks, rumours soon circulating that they were being trained into a 'Suicide Battalion'.

The bulk of the training was carried out on the ranges above Knipe Scar and on the high ground running down to Emperor's Lodge. It was on these ranges that the tactical use of this device showed great promise. It was found most effective to use the CDLs in groups of four to six advancing in line abreast with beams interlocking. It was most important that at no time did the beams fall on the troops within the 'cloaks' of darkness as they would then appear in silhouette to the enemy and be easily picked off. The experienced operator was able to elevate and depress his beam (+ 10° elevation to −10° depression) via a hand wheel at the same time checking through a dark green glass on the carbons in case of adjustment. In this way, he was able to compensate for the tank's progress over undulating ground.

It was, however, found as time went on that, when viewed from a flank, the troops in these triangles of darkness were silhouetted and it was further learned that the tanks, when not maintaining accurate station, became themselves easy targets for enfilade anti-tank fire. Various formations were evolved in order to overcome these disadvantages, i.e. the provision of flank troops equipped with CDLs to blind the enemy who were in a position to enfilade the attack.

The illuminating power of the lights was tremendous and when a squadron of sixteen tanks were operating it was possible to read a newspaper in the streets of Penrith (five miles away) on a dark night much to the wonderment of the local population who were soon in trouble if a chink of light showed in the blackout. This immense volume of light presented its own problems with the constant air-raid alerts and a special telephone line, direct to the RAF early warning system, was installed to enable the lights to be dowsed.

When 11 RTR left for the Middle East in March 1942, its place was taken at Lowther by the 35th Tank Brigade, comprising the 49 RTR, and the 152 and 155 Regiments, Royal Armoured Corps. (11 RTR set up a Middle East CDL School on arrival which was sub-

A Grant CDL with dummy gun photographed by Lieutenant Gladstone, June 13, 1945.

Left: **The well-known photograph of a Grant CDL in action (IWM).** *Above:* **Full marks to Peter Connon of Carlisle for tracking down the location of this shot on the old tank range two miles south of Lowther at Thrimby (Peter Connon).**

sequently taken over and run by 1st Tank Brigade from July 1942 to April 1944.) The 35th Tank Brigade later became part of the renowned 79th Armoured Division commanded by Major-General Sir Percy C. S. Hobart.

On September 21, 1942 a letter was sent by the War Office to the local tenant farmers requesting them to attend a meeting at Penrith. At this meeting they were informed by army officers that their land would be required for military use for a period of 6 to 8 weeks. Little did they know that this would be extended to almost 2½ years.

Normal life for the farmers quickly became impossible as most of the fences and stone walls were demolished and the fields churned-up by the tanks. With little or no grass left, and no hope of growing fodder crops for the winter, it soon became necessary for the farmers at Highfield, Woodhouse, Winder Hall and Celleron to sell their entire stock. Although the compensation was reasonable at the time (Highfield received £3,637.18.6) there was no compensation for loss of livelihood.

By the end of 1943, the authorities, sympathetic to the plight of the tenant farmers, allowed 2,000 acres, now devoid of stock-proof fences, to operate as an American-style ranch farm, each of the four farmers having an allocation of fifty cattle. Mr. T. Bowness of Highfield was appointed chief cowboy to ride the (tank) range on horseback. When autumn came the stock was sold leaving the farmers with a satisfactory profit.

The first large-scale demonstration took place at Lowther Castle on May 5, 1942, before Viscount Alan Brooke, CIGS, Earl Mountbatten, Chief of Combined Operations, Sir Oliver Lucas of the Ministry of Supply and a large number of the Directors from the War Office. As a result of this demonstration it was thought that the CDL had great possibilities.

At another demonstration, American troops were placed on a hill and warned they would be attacked from a hill 1½ miles away. At the start of the attack, two CDLs came round each side of the hill on 'scatter', this manoeuvre broke up the hill's outline and enabled three others to move on to the crest. When on top, they opened their shutters to display a 'steady' beam which was the signal for the two 'scatter' CDLs to change to 'Steady'. The tanks moved down the hill in line abreast, in the manner already described, with troops and tanks hidden in the 'cloaks' of darkness. At the bottom lay the river Lowther with a small bridge which had to be crossed. This was achieved by the outside CDLs closing their shutters and moving across the bridge where they again opened their shutters when spaced thirty yards apart. This enabled the other CDLs and supporting vehicles to move across unseen before opening up as well. The first thing the American officers and troops knew was when the lights were extinguished revealing British troops holding fixed bayonets at their chests.

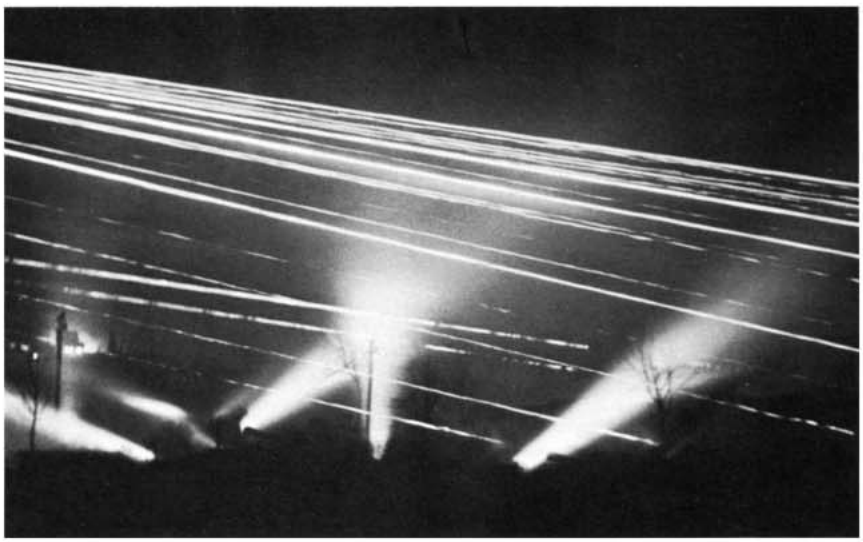
General Eisenhower was so impressed when he saw the CDL that he ordered that they were not to be used before American units had them also, and a mini-Lowther was set up at Linney Head in South Wales where US units were trained in the use of what they code-named the 'Shop tractor'. It was also laid down that this device would not be used by either British or Americans without prior approval of the British Chiefs-of-Staff. In this connection, is was considered to be inadvisable to use it in small numbers as an experiment but in large quantities as a surprise in a worth-while operation.

As more experience was gained with this device, it became clear that some of the earlier claims were exaggerated. It had already been pointed out that the scheme for using the triangles of darkness to cover the approach of assault troops necessitated using CDLs for flank protection. It was found, too, that the blinding effect was not as great as originally thought. Moreover, the whole device depended on the maintenance of secrecy until it was first used as it was realised that anti-dotes could be rapidly improvised and the value of CDL correspondingly reduced. An even more serious setback was the discovery that the German 88mm anti-aircraft gun fitted with a green sunfilter enabled the observer to see clearly the actual slot through which the light passed.

Although the demonstrations and exercises carried out at Lowther were interesting, the highly trained operators became more and more frustrated at the lack of an operational role. At the time of the battle of Alamein sufficient CDL tanks and crews were available in the Middle East to enable this device to be used but there had been no time to train sufficent co-operating troops in that theatre. It had therefore been decided that the time was not ripe to disclose this carefully guarded secret.

In 1944, comprehensive trials with live ammunition were carried out at Linney Head in co-operation with normal tanks, infantry and artillery. The disadvantage of the Matilda and Churchill tanks had been that the main armament was lost when the CDL turret was installed. In 1943, when the American Grant became available, it was found that the CDL turret designed for the Matilda could be fitted with little modification, enabling the tank to retain its hull-mounted 75mm gun.

Morale soared among the Lowther trained crews of the 300 Matilda, Churchill and Grant CDLs as they waited during the pre-D-Day build up. On D-Day, the British 1st Tank Brigade (which had returned from North Africa in 1943 and been reconstituted to include 11 RTR, 42 RTR and 49 RTR), and the American 10th Armoured Group were fully mobilised and ready to proceed overseas. However, so little interest was taken in the new weapon by field commanders that it was not until August 11 that the first of these formations was landed in France, and the



CDL searchlights and tracer light the night sky over the Rhine. Photo by Lieutenant West (IWM).

'Monty's Moonlight' photographed by Sergeant Hardy on the night of March 23, during the crossing of the Rhine (IWM).

second eleven days later. Even there, instead of being used in the operations following on the breakthrough of the US Third Army at Avranches, operations in which the Germans could seldom move except under cover of darkness, the six battalions were never moved from their disembarkation camps.

The CDL battalions were ordered to disband but like a flickering candle (albeit a 13 million candlepower one), CDLs had a brief moment of glory when they were recalled to assist at the crossing of the Rhine and the Elbe. Here they proved invaluable although the simple role of a searchlight was one for which the CDL had neither been designed, nor the crews trained.

The first operational use of CDLs in the Second World War was by the US 738th Tank Battalion (SPEC) to illuminate the Rhine after the capture of the bridge at Remagen. Thirteen 'Shop-tractors' had been issued to the unit on March 1 and, with the capture of the bridge, they were rushed to provide defence upstream prior to the construction of the ponton bridges and defence boom. Additional CDLs were called for and, altogether, three companies were employed in the protection of the bridgehead during the hours of darkness. Later, the CDLs were replaced by conventional searchlights because the constant operation of the Shop-tractors was costly in fuel and carbon rods for the arc.

The first British use of the CDL was later in March during the major crossing of the Rhine. There, the CDLs at Rees were provided by B Squadron of 49 APC Regiment and were employed giving 'movement and direction light' to the assault parties on the night of March 23. The Grant CDLs drew considerable enemy fire and one tank was destroyed.

Although jerry-can booms had been set up across the river to protect the five Bailey bridges, from March 25 to April 6, the CDLs were used to illuminate the river against German sabotage attempts against the floating bridges. Three frogmen were exposed and captured and a considerable number of logs strapped with explosives were spotted and exploded in the blinding light. During this stage German aircraft attacked the tanks and they were frequently shelled although without loss. Then, on April 29, as part of HQ 33rd Armoured Brigade of VIII Corps, B Squadron's CDLs provided movement light for both British and American troops crossing the river Elbe at Lauenburg and Bleckede.

So ended another example of Britain's ability to produce a great idea only to fail to exploit it. Many experts believe that extreme secrecy was the kiss of death to the CDL. The flicker meant to blind the enemy also blinded certain Generals who became obsessed with this particular aspect. The following quotations speak for themselves.

Lieutenant-Colonel Sir Gifford Martel (tank designer and chief of the tank forces in the British army): 'It was a great misfortune that the tanks were never properly used. In North Africa we could have cleaned up with them, and against the German defences in Normandy we could have broken through with a tenth of the casualties that we suffered at Caen'.

Major-General J. F. C. Fuller (recognised as the world's leading authority on tank strategy): 'I regard the failure to use this tank as the greatest blunder of the whole war. The course of history might have been changed immeasurably for the better had it been properly employed. We had a weapon which would have enabled us to occupy the whole of Germany before the Russians got there. We did not use it and you can see the result today' (written in 1949).

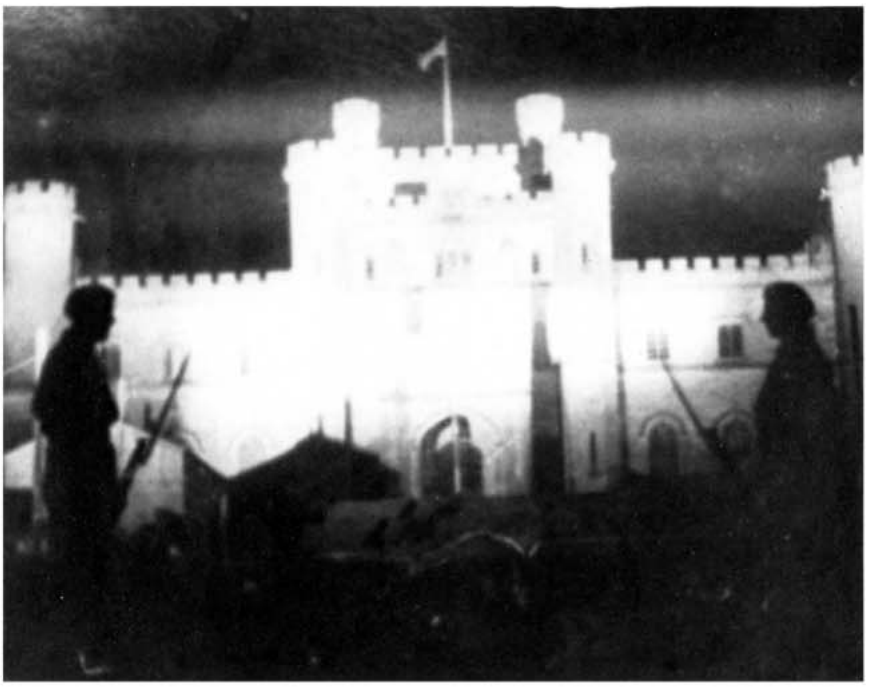
Marcel Mitzakis (the inventor who received a £20,000 award, which just covered his costs in developing it before the war): 'It was because secrecy of the tank was carried to such absurd lengths that even the Generals who should have used it did not know what the tank could do'.

After the war, Mr. Mitzakis improved the CDL projector by coupling it with infra-red rays. His improved apparatus was refused by both the War Office and the American War Department although the Americans have now adopted it and call it the Xenon Searchlight.

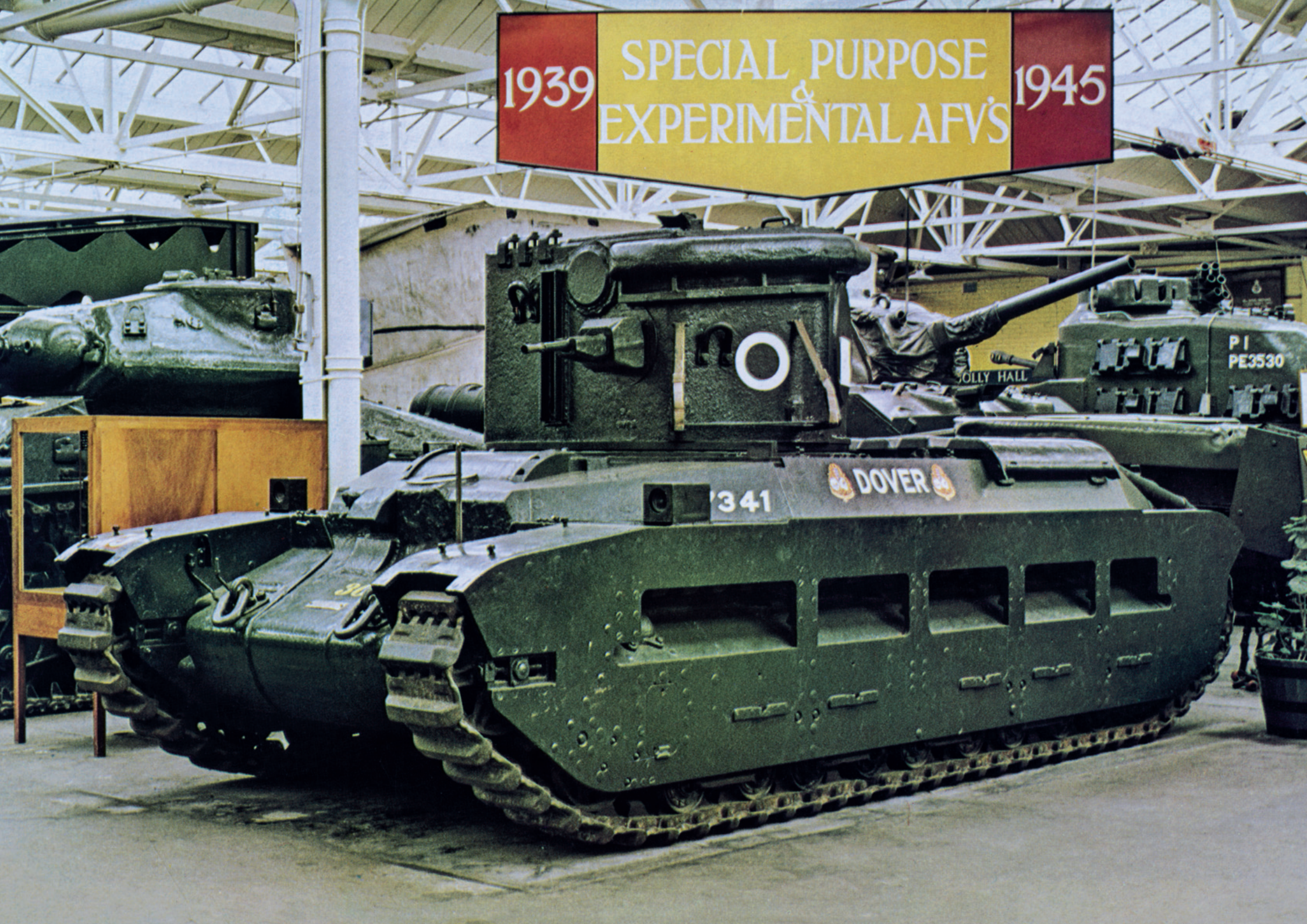
The tanks finally left Lowther Castle in March 1945. Altogether, 1,850 tanks had been converted there and 6,000 officers and men trained in their use in the English schools and 8,000 in the American.

In June 1945, 43 RTR embarked for India. This regiment was completely equipped with CDLs and during the Calcutta riots in 1946, a squadron was sent in to co-operate with the police and local forces with great success.

At Lowther, the miles of flattened dry stone walls were painstakingly rebuilt so today there is little to be seen of its wartime use. A house called Churchill House was built on the place Winston Churchill had stood to watch a CDL demonstration, only to be pulled down to make way for the M6 motorway. Ironically, the building opposite, called Emperor's Lodge, built by Lord Lonsdale to commemorate the German Kaiser's visit to Lowther in 1895, still stands only yards from the motorway. Lowther Castle was gutted after the war and now stands as a shell, its windows like gaunt unseeing eyes look down on probably the most expensive, concrete caravan standings in the world; the sole useful result of the £20 million spent on the CDL at Lowther during the Second World War.



CDL troops had a last burst of glory when they floodlit Lowther Castle on VE night (J. S. Birkett).


1939
SPECIAL PURPOSE & EXPERIMENTAL AFVS
1945
DOVER
341
OLLY HALL
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PE3530